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Annual Report of the Council

for the academical year 2016–17



Annual Report of the Council for the academical year 2016–17

The COUNCIL begs leave to report to the University as follows:

In accordance with Statute A IV 1(*c*), the Council makes the following Annual Report to the University.

The Chancellor

Lord Sainsbury of Turville has visited the University frequently over the year and represented the University at events in London and New York. He presided at the Guild of Benefactors Ceremony and the Honorary Degrees Congregation. He visited the Cambridge Judge Business School and attended the Cambridge in America Board meeting in New York. The Chancellor also attended the King's Foundation Dinner, the London Campaign Celebration, a Campaign Board dinner at Lancaster House, and a reception at Portcullis House in London. In September 2017 Lord Sainsbury hosted the farewell dinner for the Vice-Chancellor at Trinity College in Cambridge.

The Vice-Chancellor

The Vice-Chancellor, Professor Sir Leszek Borysiewicz FRS, addressed the University on 1 October 2016 about the University as 'A global community', reflecting on Cambridge's leadership locally, regionally, and internationally as well as the forthcoming challenges in Higher Education in the United Kingdom and globally. Building on this theme, at the Times Higher Education World Summit at the University of California, Berkeley, in September 2017, he called for universities to respond to the crisis in public trust by deepening their engagement with the societies they serve. In his inaugural Kate Pretty Lecture on 'The Cambridge of tomorrow' in February 2017 he continued to explore the theme of regional leadership and how operating in a regional ecosystem will be vital for the University's international ambition in research and teaching. In his valedictory speech at a reception with political stakeholders at Portcullis House in July 2017 he set out his vision of Cambridge's future as an institution firmly rooted in its region and yet actively seeking to benefit communities beyond its own.

The Vice-Chancellor has also undertaken many national and overseas engagements on the University's behalf,

travelling to several European countries, as well as China, Hong Kong, India, Singapore, and the United States.

The Council wishes to express its deep gratitude to Professor Sir Leszek Borysiewicz for his insight, vision, and leadership over the past seven years as Vice-Chancellor. The Council looks forward to working with Professor Stephen Toope from 1 October 2017.

The Pro-Vice-Chancellors

Professor Andy Neely, *SID*, took up office as Pro-Vice-Chancellor (Enterprise and Business Relations) for three years from 1 March 2017. Professor Graham Virgo, *DOW*, was reappointed as Pro-Vice-Chancellor (Education) for three years from 1 October 2017.

The Council is grateful to Professor Nigel Slater, F, for his service from 1 January to 31 December 2016 as Pro-Vice-Chancellor (Enterprise and Regional Affairs), and to Professor Duncan Maskell, W, Professor Christopher Abell, CHR, and Professor Eilís Ferran, CTH, for their service as Pro-Vice-Chancellors during the academical year.

The Council and its committees

(i) The Council: responsibilities and operation

The Council is defined by Statute A as the principal executive and policy-making body of the University, having general responsibility for the administration of the University, for the planning of its work, and for the management of its resources. It is declared to have power to take such action as is necessary for it to discharge these responsibilities. It also performs such other executive and administrative duties as may be delegated to it by the Regent House or assigned to it by Statute, Special Ordinance, or Ordinance. As the persons having responsibility for the general control and management of the administration of the University, members of the Council are regarded as the charity trustees of the University.

The Council's Statement of Primary Responsibilities (annexed to this Report) is reviewed annually together with its Standing Orders, the Code of Practice for members of the Council, and the Statement of Corporate Governance.

The Council continues to discharge its responsibilities through ordinary regular meetings (eleven each year) and, as necessary, special meetings (of which there were none in 2016–17); scrutiny of business through the Business Committee, the Advisory Committee on Benefactions and External and Legal Affairs (ACBELA), and other committees, notably the Finance Committee and the Audit Committee which are the Council's statutory committees; and through receipt and approval of routine business by circulation. Business is monitored and managed through the regular consideration of work plans. The Council has continued to hold two strategic meetings each year, one in September and one in the spring. Papers received by the Council (except where reserved or otherwise restricted for reasons such as commercial confidentiality) are available to members and staff of the University on the Council's website at https://www. governance.cam.ac.uk/committees/council/.

(ii) Council membership

In the Easter Term 2016, the Regent House approved the appointment of Professor Sir David Greenaway as an external member of the Council in class (*e*), with effect from 1 October 2017.¹

Following the biennial election of half of the elected membership, the Council welcomed new members elected with effect from 1 January 2017. There was also a bye-election in class (a). The membership until 31 December 2016 and from 1 January 2017 is attached as Annex A.

(iii) Routine reporting to the Council

During 2016–17, the Council received frequent reports from the Remuneration Committee and quarterly reports from the West and North West Cambridge Estates Board on the North West Cambridge development. The Chief Executive Officers of Cambridge Assessment and Cambridge University Press and the Chairs of the Local Examinations and Press Syndicates attended to present their respective annual reports and to answer questions in November 2017. The Executive Director of University Development and Alumni

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¹ Grace 1 of 21 June 2017.

Relations also reported on fundraising and alumni activities in May 2017.

(iv) Appointment of Registrary

In last year's Report, it was noted that the process to identify the next Registrary had commenced, following the decision of Dr Nicholls to retire with effect from 31 December 2016. In June 2017, following consultation with the Vice-Chancellor-Elect, the Council gave notice that it had appointed Acting Registrary Emma Rampton, previously Academic Secretary, to the office of Registrary from 1 October 2017.³ Interim arrangements to cover the role of Academic Secretary were endorsed by the Council in January 2017; arrangements over the longer term will be considered in the Lent Term 2018.

(v) Strategic framework for the development of the University estate

In October 2016, the Council and the General Board approved a framework providing guiding principles and a broad sense of direction for the development of the University's estate. The document had been developed at the instigation and under the oversight of the Estates Strategy Committee, a sub-committee of the Planning and Resources Committee. The framework was welcomed by the Council as a well-articulated statement of the University's vision for the development of the estate, noting that there were likely to be tensions and trade-offs between capital ambition and affordability, and important issues to consider around improving space efficiency.

(vi) Cyber security

The Information Services Committee, a joint Committee of the Council and the General Board, commissioned a review of the University's cyber security arrangements in light of its position as a high level risk on the University's risk register, which had attracted some Priority 3⁵ recommendations in a report received by the Audit Committee in January 2015. The Director of University Information Services and Professor Ian Leslie (a member of the Cybersecurity Technical Advisory Group chaired by external member

 $^{^{2}}$ Summaries of activity in 2016–17 are included in this Report (p. 10 and 11).

³ Reporter, 6472, 2016–17, p. 710.

⁴ Reporter, 6443, 2016–17, p. 96.

⁵ This level of priority denotes 'Important issues to be addressed by management in their areas of responsibility'.

Mr Ian Watmore that had conducted the review) reported to the Council on the review's findings in January 2017. The review identified the need for a change in culture and strong leadership to take ownership of the risks, as well as the development of specialist teams. Work in this area will be taken forward by Mr Vijay Samtani, who joined the University as Chief Information Security Officer in September 2017.⁶

(vii) Remuneration Committee

The Council is supported by a Remuneration Committee, chaired by an external member of Council, which provides scrutiny of the pay and benefits of senior University staff. Annually the Committee, in conjunction with the wider Council, sets the objectives, reviews the performance and recommends (biennially) the remuneration of the Vice-Chancellor. During 2016–17, the Committee approved the terms of the package to be offered in the recruitment to several senior roles; approved the establishment of an **Employment and Remuneration Committee for the** Investment Office; and received requests for market pay for approval, which are now supplied with more detailed contextual data. The Committee's current terms of reference are under review; recommendations will be reported to the Council in 2017-18.

(viii) Council self-effectiveness review

As part of its evaluation of its own operations, in 2015–16 the Council established a review committee chaired by Mr John Shakeshaft, Deputy Chair of the Council, constituted from among the members of the Council, to carry out a self-effectiveness review of the Council. Its findings were endorsed by the Council at its meeting in November 2016. As a result, charity law specialist Mr Sam Macdonald of Farrer and Co gave a presentation to the Council in March 2017 on the role and responsibilities of charity trustees, changes to working practices are being implemented, the documents governing the conduct of the Council's work are under review, and recommendations concerning the membership of the Council have been referred to the Governance Review Working Group for consideration as part of that review.

The Council has also agreed to make changes to its standing orders to cover the following: historical information concerning Graces initiated by the Regent House, including precedents, to guide its consideration of new Graces; revisions to its arrangements for the sabbatical and other leave of Council members; and an express commitment to the prompt announcement of decisions made by the Council.

(ix) Proposals concerning the public display of class-lists and related matters

As reported in last year's Annual Report, a ballot was called on proposals concerning changes to the sharing of information about class-lists, including the discontinuation of the public display of class-lists outside the Senate-House. Following the vote, the recommendations were not approved (514 votes in favour, 727 votes against). The potential effects of the implementation of the General Data Protection Regulation (see p. 9), including its impact on the public display of class-lists, are currently being considered.

Teaching and research

Teaching and research are the responsibility of the General Board and of the Schools, Faculties, and Departments. The General Board reports annually to the Council; the Board's report for 2016–17 is annexed to this Report and provides a detailed commentary.

Governance and constitutional matters

(i) Review of the Careers Service

In November 2016, the Council established a panel chaired by Professor Martin Millett, Head of the School of Arts and Humanities, to conduct a review of the Careers Service. The Council and the General Board received the report of the review group in the Easter Term 2017 and broadly endorsed its recommendations. It was agreed that a small working group, to include the Chair of the Review Panel, would work over the summer to consider how the recommendations could be implemented, for report to the Council in the Michaelmas Term 2017.

⁶ Further information about measures to deal with cyber security threats is available at https://www.uis.cam.ac.uk/cybersecurity.

⁷ Reporter, 6449, 2016–17, p. 283.

(ii) Student conduct, complaints, and appeals

The General Board's Annual Report (p. 26) notes the approval, by Grace 3 of 22 February 2017, of the introduction of a procedure for the consideration of student complaints of harassment and sexual misconduct and, by Grace 3 of 5 July 2017, of revised student complaint and review procedures. Pending the completion of work on those procedures, work on the review of student disciplinary procedures was suspended. The Review Committee on Student Discipline is expected to report on further proposals to revise the student disciplinary framework in 2017-18, after the Office of the Independent Adjudicator has published new guidance on disciplinary procedures.

(iii) Review of three specific areas of governance

In May 2017, the Council published the membership of the Governance Review Working Group and its terms of reference, and invited comments as part of an initial phase of information-gathering, in advance of the commencement of meetings of the Working Group in 2017-18.8

(iv) Graces for submission to the Regent House under Special Ordinance A (i) 5

In the course of the year, the Council received two Graces initiated by members of the Regent House.

(a) Investment policy

In January 2017, the Council gave notice that it had agreed to authorize submission of Grace 1 of 11 January 2017 concerning a policy of disinvestment in companies involved in the extraction of fossil fuels.9 It noted that the Grace could not operate as a mandate in respect of the exercise of the Council's fiduciary responsibility for the University's investment practices and therefore proposed that a report be commissioned into the different approaches the University might take to issues associated with the policy of divestment which the Grace supported. The membership and terms of reference of the working group established to prepare that report were published in the Easter Term 2017.10

The publication of the Grace followed a Discussion on a topic of concern covering related matters, held on 22 November 2016.11 The Council responded to the remarks made at the Discussion in January 2017.¹²

(b) Removal of the age limit on membership of the Regent House

In June 2017, the Council acknowledged receipt of a Grace proposing the removal of the age limit applied to certain classes of members of the Regent House. The Grace was discussed at the Council's meeting in July, at which it was agreed that the Grace should be considered further at its meeting in September 2017.¹³ The Council has agreed to consult with the Colleges on the form of its response and expects to publish a formal response to the Grace early in the Lent Term 2018.

(v) Provisions concerning the initiation of Graces and of amendments to submitted Graces by members of the Regent House

Following receipt by the Vice-Chancellor of a request for a review, under Statute A IX 1, concerning its decision to submit Grace 1 of 11 January 2017 noted above, the Council agreed to propose amendments to Statutes A III and A VIII (c) to affirm, for the avoidance of doubt, the authority of the Regent House to initiate and submit Graces to the Regent House. Following the approval of Grace 1 of 27 September 2017, the amendments have been submitted to the Privy Council.

Accountability and audit

(i) Audit Committee membership

The Committee consists of nine members, the majority of whom are external. The Committee is chaired by Mr Mark Lewisohn, an external member of Council (in class (a)). There are two members of Council (in class (b)), four external members (in class (c)), and two co-opted members (in class (d)). Also in attendance at meetings of the Committee are the Chairs of Cambridge University Press and Cambridge Assessment Audit Committees, senior University officers including the Acting Registrary,

⁸ Reporter, 6464, 2016-17, p. 508.

⁹ Reporter, 6450, 2016–17, p. 292. The Grace was approved on 20 January 2017.

¹⁰ Reporter, 2016–17; 6464, p. 509; 6467, p. 556.

¹¹ Reporter, 2016–17; 6441, p. 64; 6446, p. 164.

¹² Reporter, 6450, 2016–17, p. 291.

¹³ Reporter, 6475, 2016–17, p. 770.

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the Senior Pro-Vice-Chancellor, and the Director of Finance, the University's internal auditors and, where relevant to agenda items, the external auditors. After taking up post in May, the Chief Financial Officer attended his first meeting of the Audit Committee on 11 May 2017.

There has been one change to the Audit Committee's membership during 2016–17. Mr Jeremy Caddick, who was a member of the Committee in class (*b*), ended his term on 31 December 2016. Council member Dr Nick Holmes joined in January 2017, following his appointment to the vacancy.

The Council is grateful to all current and former members who give their time and expertise in support of the Audit Committee's work.

(ii) Internal audit function

Deloitte LLP was reappointed for three years with effect from 1 August 2014 to provide the University's internal audit function. At its 11 May 2017 meeting, the Audit Committee agreed to renew the internal auditors' contract for a further two years, until 31 July 2019. A review of the means and context of internal audit and a market-testing exercise will be conducted in time for the appointment of new internal auditors, or the reappointment of the existing auditors, on 1 August 2019.

The third departmental assurance survey ran smoothly in 2016–17 and the findings were reported to the Audit Committee in June 2016. The survey report enables the Audit Committee, administrative offices, and Schools to see at a glance where weaker areas exist by department and topic. Engagement with Schools on the survey was particularly strong this year. The survey remains a good method for seeking broad assurance, although the Audit Committee and Deloitte continue to monitor its effectiveness.

Key audits in 2016–17 included Alumni Management and Fundraising, UIS Reorganization Review, North West Cambridge Financial Appraisal, Staff Absence Management, Graduate Student Admissions, Space Utilization, and the CamSIS Improvement Programme (based on a summary memorandum, as a check on progress). Next year's internal audit plan has been

approved and will include the University's approach to International Activities, General Data Protection Regulation Readiness, Cyber Security, North West Cambridge Phase 2, and the CamSIS Re-implementation.

One audit report carried limited assurance this year, which was the report on Space Utilization. The Director of Estate Strategy and the Head of Estate Planning attended the June meeting in order to respond to the report and take questions. This matter will be followed up in 2017–18.

(iii) Reappointment of external auditors

At its January 2017 meeting the Committee received positive feedback from the Group in regard to the performance of the external auditors. The Committee therefore recommended to the Council that a Grace be promoted for the reappointment of PwC as the external auditors for the 2016–17 financial year.

Mr Stuart Newman succeeded Mr Charles Joseland as the Engagement Partner for the external auditors in January 2017 following Mr Joseland's retirement from PwC.

(iv) Risk, emergency, and continuity management

Risk management is a standing item on the Audit Committee's agenda. The University's Key Risk Register is updated and reviewed by the Risk Steering Committee, which meets at least twice a year. The Risk Steering Committee is chaired by the Senior Pro-Vice-Chancellor.

Risk management training is provided biannually through the University's Personal and Professional Development training programme. Specific sessions for individual institutions or groups are also given where requested or suggested.

All institutions are expected to have Emergency Action Plans and these are now hosted on Estate Management's Micad system. The system enables automated reminders to be sent to institutions when their current plan needs renewing (required annually).

Following collaboration with University Information Services (UIS), the emergency response Silver Team has use of a well-equipped Primary Incident Management Room. A new Secondary Incident Management Room has recently been established with improved facilities and location in comparison to the previous room, which offers greater resilience as an emergency planning location.

A desktop exercise for the University Silver Team took place in September 2017.

(v) Policy against bribery and corruption

The Committee received an annual report on the University's policy against bribery and corruption at its June meeting. There had been no reports of bribery and one case of financial fraud in the University group; the fraud was under the threshold that required reporting to HEFCE. An allegation of fraud involving a former embedded researcher in a College was under investigation, although there was no financial loss to the University. An allegation of malpractice by a University employee, including possible fraud, is currently under investigation and was reported to HEFCE in September 2017.

Training is conducted through the University's online Bribery and Corruption training module via Moodle. A reminder to undertake training was issued by the Acting Registrary to all Heads of Institutions and Departmental Administrators in April 2017. The message highlighted the importance of individuals' participation in the training and clarified who should undertake the training; there was an 18% increase in uptake of the training when compared to the previous year. In response to feedback, an improved training module and reporting function is under development.

There was one case of whistleblowing in the University. This is pending resolution subject to potential further investigation under the whistleblowing policy.

(vi) Assurance on the Colleges' use of funds transferred by the University to the Colleges for educational purposes

An annual meeting is held with representatives from the Colleges as part of an exercise by which to seek assurance that the funds, being the share of student fees received by the University which have been transferred to the Colleges, have been used for the educational purposes intended. An exercise was undertaken to compare Colleges' total fee income and restricted funds income with expenditure on education. Reasonable assurance could be given that the money was spent for the purposes intended. A report on Colleges' value for money activities was also received and potential areas for greater collaboration between the University and Colleges were discussed.

(vii) Audit Committee presentations

The Committee has continued to seek further sources of assurance on different topic areas by inviting senior officers to present at its meetings. It has also invited relevant officers or external visitors to provide further information in relation to specific reports received by the Committee. During 2016–17 the Committee received the following presentations:

- 5 October 2016. The Pro-Vice-Chancellor (Institutional and International Relations) spoke about the management of risks relating to Staffing which is a top risk on the University's Key Risk Register. The Director of the UIS discussed the latest developments on the cyber security programme and also presented a report on the data breach that occurred in June/July 2016. Ms Alice Perkins reported on an effectiveness review of the Committee (see section (ix) below).
- 19 January 2017. The Director of UIS and Professor lan Leslie, a member of the Cyber Security Technical Review Group, reported on the Group's findings. The Director of UIS followed with a further update on the cyber security programme.
- 9 March 2017. The Vice-Chancellor gave his annual report to the Committee. The Head of the Registrary's Office presented on the University's governance structure and processes. The Interim Head of Research Operations presented the annual report on research grant sponsors' audits.
- 11 May 2017. The Director of Estate Strategy and the Head of Estate Projects gave a presentation on the University's estate management strategy.

 29 June 2017. The Director of Estate Strategy and the Head of Estate Planning attended to respond to the audit report received on Space Utilization.

(viii) Audit Committee workshops

The Committee held an extended meeting on 17 November 2016 to discuss the outcomes of the Effectiveness Review conducted by Alice Perkins of JCA Partners LLP during Easter Term 2016. This led to a number of actions being agreed on the basis of the recommendations made (see section (*ix*) below).

At its June 2017 meeting the Committee agreed to schedule a series of workshops in 2017–18 to enable fuller discussion of key areas of risk. The topics proposed include cyber security and space utilization. A further workshop will be led by the Chief Financial Officer. An extended meeting in November 2017 was arranged to enable the Committee members to meet the new Vice-Chancellor, Professor Stephen Toope.

(ix) Audit Committee effectiveness review

At its January 2016 meeting, the Committee agreed to commission an external consultant to conduct a review of the Committee's effectiveness. The review involved individual interviews with all members and regular attendees of the Committee. The consultant also observed one meeting. The consultant's final report was received by the Committee at its October meeting.

A number of recommendations were made, actions against which have been implemented throughout the year. Key actions have included the following:

- The Head of the Registrary's Office's presentation to the Committee on the University's governance structure at its March meeting to improve understanding of the University's operations, particularly for external members.
- Whilst all audit reports continue to be circulated, only those with limited or nil assurance are discussed in detail at meetings in order to free up time for deeper discussion of other topics.
 This was implemented with effect from the Committee's January 2017 meeting.

- A second external member of the Audit Committee now attends the Risk Steering Committee. Mr John Aston attended his first meeting in June.
- It was agreed that the Committee should meet in alternative venues around the collegiate University. Meetings since March 2017 have been held at a range of locations with links to academic departments, non-School institutions, and the wider University in reflection of the breadth of operations represented in the reports submitted to the Committee. This change has been well received.
- The current style of induction sessions for external members, whereby senior officers from different sections of the University's administration and the Schools explain and take questions on their areas of operation, will be extended to all members in future

Government policy and the national environment

(i) Implications for the University of the UK leaving the EU

The Prime Minister informed the European Council, on 28 March 2017, of the UK's intention to leave the European Union, triggering Article 50 of the Treaty of Lisbon. The UK must now negotiate the terms of its withdrawal from the EU within two years.

The Council, at its meeting in November 2016, approved broad strategies to guide work in the different areas of University activity. More detailed work is being conducted and reported via the General Board's Education and Research Policy Committees. ¹⁴ The University's response to the government's green paper, 'Building our Industrial Strategy', and its contribution to the regional response, which were endorsed by the Council and the General Board in the Lent Term, provided strong evidence of the University's – and the sector's – ability to make a significant contribution to the development of strategy in the post-Brexit era, both at a national and regional level.

¹⁴ See p. 30 of the General Board's Annual Report.

The Council has also, against a background of the post-Brexit increase in the incidence of hate crimes, endorsed statements made by the Vice-Chancellor evidencing the University's firm stance against racism and its celebration of diversity.

(ii) National funding and regulation

In December 2016, the Council and the General Board, on the recommendation of the Planning and Resources Committee and the General Board's Education Committee, and with the support of the Colleges' Committee, agreed that the University would participate in Year Two of the Teaching Excellence Framework (TEF). In June 2017, the HEFCE published the results of TEF2, in which the University received a Gold award, the highest available to participants.¹⁵ The government confirmed on 2 October 2017 that the maximum level of tuition fees would be frozen at £9,250 for the academical year 2018-19.

The Higher Education and Research Act 2017 received Royal Assent in April 2017. The University contributed to the debate during the passage of the legislation, through its replies to consultations, by giving evidence to enhance sector responses, and by providing briefings. The Office for Students, replacing the HEFCE and OFFA, and UK Research and Innovation, are expected to be in place by April 2018. The Council and the General Board approved a response to a consultation on the fee arrangements for the Office for Students in the Lent Term 2017.16

(iii) Local and regional engagements

As a partner of the Greater Cambridge Partnership (GCP, formerly known as the City Deal), the University has been actively supporting the Partnership's efforts to deliver sustainable and long-term growth across the Cambridge region. Working collaboratively with the Local Enterprise Partnership and the three local councils, the University has advised the GCP on a number of transport, housing, and skills schemes, through its representation on the Executive and Programme Boards.

The University also developed an important working relationship with the new Combined Authority and Mayor, whose spatial plan and infrastructure powers provide the chance to develop a shared regional agenda for growth.

To ensure maximum connectivity across the 'Golden Triangle' of universities in Oxford, Cambridge, and London, and the Cambridge Cluster, the University has also engaged with the National Infrastructure Commission with a view to securing the East-West Rail line and a third railway station at Cambridge South.

As part of the University's regional response to the Industrial Strategy, the University of Cambridge has also led a new regional skills partnership called Accelerate EAST. Formed by higher and further education and commercial partners from across East Anglia, this group aims to raise aspirations, and improve connectivity and training opportunities for communities across the region.

(iv) General Data Protection Regulation

The General Data Protection Regulation (GDPR) will apply from 25 May 2018, replacing the Data Protection Act 1998. It sets out a more prescriptive and punitive regulatory framework for organizations to follow when processing personal data. Preparation for the implementation of the GDPR is being taken forward through a working group to ensure a co-ordinated approach to the implementation of the changes across the collegiate University.¹⁷

Prevent duty

HEFCE issued an 'Updated framework for the monitoring of the Prevent duty in higher education in England' in September 2016.18 (Prevent is one of the four elements of CONTEST, the government's counterterrorism strategy. It aims to stop people becoming terrorists or supporting terrorism.) As part of this framework, providers were required to submit an annual report to HEFCE indicating that they 'continued to have 'due regard' to the Prevent duty over the previous operating or academic year.' The first Prevent annual report for the period 1 October 2015-30

¹⁵ Reporter, 6449, 2016–17, p. 270.

¹⁶ Reporter, 6450, 2016–17, p. 293.

¹⁷ Further information is available at https://www.information-compliance. admin.cam.ac.uk/data-protection/general-data-protection-regulation.

http://www.hefce.ac.uk/reg/prevent/framework/.

September 2016 was approved by the Council in March 2017 for submission to HEFCE.¹⁹ The Chief Executive of HEFCE confirmed to the Vice-Chancellor in July 2017 that the University had demonstrated due regard.

Cambridge Assessment and Cambridge University Press

(i) Governance

As was reported in last year's Report, the Council established an implementation group under the chairmanship of the Senior Pro-Vice-Chancellor, with representation from the Local Examination Syndicate and the Press Syndicate, to take forward arrangements for a proposed commercial board to oversee the University's business operations. The Council approved the group's proposal that, in the first instance, that board should restrict its activities to the University's two main businesses, with the Syndicates delegating such powers as necessary to the board to oversee the assets entrusted to them by the University. The Council approved, in January 2017, the membership of a Press and Assessment Board (PAB) and agreed in principle the terms of draft letters from the Council to each of the Syndicates, inviting the Syndicates to consider delegating to the PAB those of their powers which fell within the proposed terms of reference of the PAB. The membership of the PAB and relevant delegations were subsequently approved by the Syndicates, and the PAB held its first formal meeting in June 2017, having met informally from February. Meetings of the PAB take place approximately monthly. Minutes of PAB meetings are provided to the Council and the Syndicates. Single joint audit and remuneration committees for both businesses have been established as sub-committees of the PAB in place of the separate committees which formerly existed under each of the Syndicates. The Council and the Syndicates will keep under review the effectiveness of the arrangements and consider whether and how they need to evolve further over time.

(ii) Cambridge Assessment (CA)

The Council annually receives a report from Cambridge Assessment.

Cambridge Assessment's preliminary results for 2016–17 show a 5% growth in income to £416m; an operating surplus of £78m; and an anticipated transfer of £23.8m to the University. The two international businesses between them now account for over 80% of CA's income. The UK market remains challenging and OCR's²⁰ income declined this year but it achieved an operating surplus of almost £2m through careful management of the product portfolio, various operational cash releasing initiatives, as well as tight controls on discretionary spend.

CA has a number of important partnerships both within the University and more widely. The most significant external partnership is with the British Council, which supports the distribution of CIE's (Cambridge International Examinations) qualifications worldwide and is one of the three IELTS²¹ partners.

The development of new office accommodation on the Triangle site remains on track with an anticipated occupation date in early 2018. This development will accommodate all Cambridge-based staff in a single location and provide sufficient space to absorb planned growth.

CA anticipates that income will grow at a faster rate over the next five years and that compound annual growth for the operating surplus will be around eight per cent. Thirty per cent of the annual operating surplus is transferred to the University and applied for capital purposes. The transfer to the University over the next five years (plus the current year) is forecast to be in the region of £192m, which includes the estimated value of the central Cambridge buildings occupied currently by CA that will transfer to the University estate once CA has moved to the Triangle site. There will be continued investment in research, technology, product development, infrastructure, and staff, although capital expenditure is expected to fall significantly once the Triangle site is occupied and implementation of SAP, the business operations and customer relations management software, is complete.

(iii) Cambridge University Press (CUP)

The Council annually receives a report from Cambridge University Press.

¹⁹ Further information on the University's response to Prevent is available at http://www.prevent.admin.cam.ac.uk/.

Oxford, Cambridge and RSA Examinations.

²¹ International English Language Testing System.

The Press's sales in the financial year to 30 April 2017 were £306m, up 14% on the previous year. At constant currency (taking out the impact of fluctuations in foreign exchange) this equated to sales growth of 5%. Operating profit before exceptional one-off costs was up by almost £10m at £16.3m.

Despite a turbulent political environment, the weakness of sterling added to underlying economic growth. In this period the Press saw more than 90% of sales continuing to come from markets outside of the UK, and digital sales for the year increase to 36% of all sales.

The Academic Publishing group celebrated the successful launch of Cambridge Core, which has brought together over 30,000 e-books and 1 million journal articles into one online platform and which has seen an average of 3 million downloads per month. The number of journals published rose to 391, and a major publishing partnership with the Royal College of Psychiatrists was announced. The quality of Academic Publishing remains high and has been recognized through 6 winning titles and 11 honourable mentions at the Professional and Scholarly Excellence (PROSE) Awards.

Digital products to support English Language Teaching continued to grow, particularly in Brazil, Thailand, and China, where sales of Kid's Box China Edition hit 3 million. The use of Cambridge Dictionaries Online grew sharply with traffic passing 20 million monthly active users. The launch of Write and Improve demonstrated the Cambridge advantage – the additional impact from effective co-ordination across the University under the Cambridge brand – by bringing together expertise from researchers at the University, Cambridge Assessment, and the Press to develop a new digital service using the latest machine-learning techniques to allow students to receive instant automated feedback on the quality of their written English.

The Educational Publishing group again saw rapid increases in sales, with a strengthening of position in key markets such as Australia and India, and the opening of a new office in Nigeria. In addition, its Education Reform business expanded its work with governments in the Middle East and Asia.

Understanding customer needs and harnessing the advantage of being part of a leading university remain two critical areas of focus for the Press to continue to deliver its mission effectively.

West and North West Cambridge Estates Board

(i) North West Cambridge development

The North West Cambridge development is a key part of the University's strategy to maintain its global research profile through the development of a vibrant, mixed-use extension to the City, providing affordable and suitable accommodation for University and College staff (primarily postdoctoral researchers), extensive academic and commercial research floor-space, accommodation for postgraduate students, and local centre facilities to support the new community. The development will also provide significant housing and social facilities for the City more generally. 2017 saw the first residents move into the staff accommodation and will see the opening of community facilities in addition to the Primary School.

Quarterly reports to the Council from the Chair of the West and North West Cambridge Estates Board in 2016–17 have focused on the building programme and readiness for occupation of the first residents. Negotiation of commercial arrangements for market housing, the supermarket, the hotel, the senior care facility, and the nursery operations have continued and, in some cases, have come to fruition. Work is underway to identify and define the priorities for a second phase of development at North West Cambridge, for recommendation to the Regent House by the Council.

Over 1,000 people are now working on the development of the site and four and a half million working hours were logged by June 2017. The majority of the buildings in Phase 1 will be completed in 2017, including 700 homes for University and College staff, shops, and a doctor's surgery. Developers constructing housing for sale started on site in summer 2016. The supermarket and community centre will both open

in autumn/winter 2017. Girton College has taken occupation of Swirles Court, offering accommodation in the form of 325 student rooms. The first University staff residents began taking occupation from June 2017, and over 400 interested University and College staff members are on the waiting list for the site.

The work of the North West Cambridge Audit Group was reported in the Council's previous Report. The resulting two reports confirmed that the project would still achieve the strategic aims set by the University but also made a number of recommendations as to the future governance and management of the North West Cambridge Development as well as other major University projects. All of the recommendations relating to Phase 1 and the majority of those from the Group's second report have been implemented, with the outstanding ones being University-wide matters or matters in progress for resolution by the end of 2017.

The staffing and governance arrangements for the project now include a full-time Project Director, Finance Director, and Head of Corporate Governance, as well as a Risk and Audit Committee, Nominations Committee, and Remuneration Committee.

(ii) West Cambridge development

The Board also has strategic oversight of the adjacent West Cambridge site, which is the University's opportunity to establish a world-class, well connected research and development environment focused on the physical sciences and technology which benefits Cambridge, the region, and the UK – one that provides facilities that help the University to retain its globally competitive position by continuing to attract and retain the world's best academics and researchers, as well as supporting entrepreneurship and collaboration with industry. The University is developing the new Cavendish Laboratory and exploring the integration of the Department of Engineering on the West Cambridge site.

To assist the Board in developing both the North West and West Cambridge sites in a complementary manner and to ensure that any opportunities which arise from the parallel development of the sites are exploited, the West Cambridge Site Development Board has been replaced with an Academic Board that will advise across both West and North West Cambridge and be responsible for developing the academic strategy for both sites.

Development and Alumni Relations (CUDAR)

2016–17 has been a strong year, with success across all elements of the programme. Most significantly, the University closed 2016–17 ahead of target at £9 million; £36.6 million was raised in June alone. This brings the overall Campaign total, as at 31 July 2017, to £960 million towards the £2 billion target.

(i) Fundraising

This has been an exceptional year in development across collegiate Cambridge. CUDAR reached several key milestones for the first time, including funds raised and prospect visits made. Traditionally performance is stronger in the second half of the year; 83% of new funds were raised in the second half of the financial year and 70% in the last quarter.

In March the fundraising team surpassed the number of visits in 2015–16 and reached its target of 1,250 visits by June. Fundraisers met with 560 unique prospects in 2016–17, 100 more than the year before. There is significant momentum heading into 2017–18, with 8 eight-figure gifts currently in solicitation.

A key element of such success is University and College collaboration. An example of this was the Jennifer Ward Oppenheimer Professorship of the Deep History and Archaeology of Africa, linked with Magdalene College. Since 2013, academics, College leaders, and fundraisers from both College and University have worked in concert to realize the ambition of establishing an endowed Professorship in this area. The Professorship was established by Grace in May 2017.

Stewardship of the collegiate University's most generous donors continues to play a vital role. At the Guild of Benefactors event held on 22 March 2017, 84 donors and their guests attended with 11 Companions inducted into the Guild at the ceremony. The Vice-

Chancellor's Circle event held on 1 July 2017 was attended by 26 members and their guests, along with 19 new members.

To provide an improved experience and more effective donor recognition, new donors will be welcomed into giving societies on an ongoing basis from the start of 2017–18 (previously on an annual basis).

(ii) Alumni engagement

In 2016–17, four new alumni groups were added to our global alumni network, increasing the total number of alumni groups to 462 in 116 countries worldwide.

Over the last academical year, 31 development and alumni relations events were held of varying scales, involving 4,987 attendees, including alumni and donors across six countries and four different regions of the UK. Global Cambridge, the University's largest alumni events series, played an important role in serving the needs of internationally based alumni by keeping them connected with the institution and laying the vital foundation for giving and volunteering. In 2016–17, events took place in Bristol, Edinburgh, Hong Kong, Dusseldorf, Singapore, Melbourne, and Sydney which were attended by a cumulative total of 1,059 alumni.

Twelve Colleges and the University collaborated to design and deliver an alumni survey. Approximately 30,000 alumni responded (23% of pool) and significant interest was identified for more engagement and communication with both College and University.

The Alumni Advisory Board (AAB) meeting took place in January and July 2017 and continues to provide strategic advice on alumni communications and network programming. In 2016–17, two new members were welcomed to the Board.

(iii) The Campaign: Dear World... Yours, Cambridge

The Campaign Board met in December 2016 and May 2017. Since December the Board has expanded to eleven members, having welcomed three new members in 2016–17. The Board has provided strategic input in a number of key areas over the past year,

including the Campaign messaging framework, support for postgraduate studentships, and other campaign priorities. The Campaign Advisory Group (CAG) met three times in 2016–17, continuing to advise on the strategic direction of the campaign. CAG has focused on ways in which Cambridge can improve its ability to raise gifts of £50 million+, the lessons to be learned, and how the institution can evolve to strengthen this.

A new fundraising committee for Cavendish III is being formed with three members providing the foundation for a Board which will engage directly with academic leadership, supported by Development and Alumni Relations.

The University development team is working with the Pro-Vice-Chancellor (Education) to launch a targeted campaign to raise £300 million for postgraduate studentships. The programme will involve a significant challenge fund from the University and will enable both the Colleges and the University to accelerate fundraising activity for this key campaign priority.

In 2016–17 two major events were held to engage volunteers and donors. Campaign celebrations in Mumbai (22 February) and London (11 May) featured campaign leadership and priorities, and highlighted outstanding academics and students of Cambridge. The London Engagement Series of events was launched in January 2017 by the Campaign Board to unlock untapped prospect potential for the benefit of the Colleges and the University. All events to date were oversubscribed and there continues to be a high level of interest in upcoming events.

(iv) Communications

Campaign and performance reporting is now communicated regularly from CUDAR to key stakeholders and the collegiate community. The first of what will become a termly newsletter was sent by the Campaign Co-chairs reporting on key gifts and progress made; University performance is shared monthly with the University's senior officers; and the wider collegiate community receives Campaign performance updates semi-annually.

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Significant work has taken place in 2016–17 on Campaign messaging to frame priorities for collegiate Cambridge. This work is in the latter stages of consultation and continues to evolve through discussions with the Campaign Board, Cambridge in America Board, Campaign Advisory Group, and College and University Leadership.

The transition of the CUDAR communications team to the Office of External Affairs and Communications is complete, with necessary procedures in place for print and digital communications to support the alumni and development communications programme.

In The Know was introduced in March 2017 as a regular and collaborative communication, compiling content from across the collegiate University pertinent to development and alumni relations activity. It is distributed to all staff in CUDAR, Cambridge in America, Cambridge Colleges Development Group, Heads of School, the Cambridge Judge Business School, the University Library, the Fitzwilliam Museum, and the Gates Trust, and has a click rate of over 75% on average.

(v) Institutional and intercollegiate capability and systems

The University's development programme is structured to align with the six Schools. Development professionals now provide a direct line of service to academic leadership. Key progress continues to be made in embedding a culture of philanthropy, with dedicated fundraisers now in place in all Schools (and the University Library).

The new Director of Development started in post in September 2016 and the new Head of Major Gifts (Schools-based) in May 2017. The Cambridge University Health Partnership team is fully staffed with a Director of Development and Senior Associate Directors for the School of Clinical Medicine, Cancer, and Papworth Hospital.

Collaboration between the University and the Colleges remains a key focus and strategic priority for CUDAR, and is a standing item for review and discussion at the Joint Committee on Development termly meetings.

The third Annual Collegiate Cambridge Development

Conference took place on 22 June 2017 at Robinson College; more than 225 staff from across the Colleges and University attended.

The following sections of this Report are submitted on behalf of the Council and the General Board.

University resources

(i) Financial position

The Council oversees planning and resource allocation matters through the Planning and Resources Committee (PRC), a joint Committee of the Council and the General Board. A significant proportion of the PRC's work each year is the preparation of the University budget and five-year financial forecasts, which are reported in detail in the Report on the Financial Position of the University (the Budget Report). The financial forecasts for the next five years show the Chest remaining in deficit across the planning period. Although this position is regarded as manageable for the short term, the long-term financial sustainability of the University requires the generation of additional income and effective control of expenditure.

Significant financial uncertainty and major changes in the external environment continue to dominate the planning horizon. The terms of the UK's withdrawal from the EU are under negotiation and the higher education sector is heading towards major changes in the way that education and research is governed. In addition, cost pressures on major items of expenditure including pensions, pay, and construction costs are expected to continue for the foreseeable future. The PRC has issued guidance for the next Planning Round which allows for allocations to institutions to increase by no more than one per cent.

(ii) The Capital Plan

The PRC is also responsible for managing the University's capital planning, and for making allocations from the Capital Fund. The need for substantial investment in buildings remains, with major academic developments

planned at the Cambridge Biomedical Campus, the New Museums site, the Old Addenbrooke's site, and at West Cambridge – the last including both the new Cavendish Laboratory and the phased relocation of the Department of Engineering.

The University's forecast capital expenditure is ambitious, totalling more than £4 billion over the next 15–20 years if all proposed projects are taken forward. University resources in isolation are insufficient to deliver this magnitude of capital expenditure and those projects that are fundamental to delivering core academic strategies will have to be prioritized. The Capital Fund must also be managed in such a way that the University is able to respond to opportunities which arise, for example through philanthropy or government initiatives. Accordingly, the PRC will continue to scrutinize closely the academic and business case for new buildings, and will continue to review all projects to ensure that opportunities for securing external funding have been fully explored.

The Council has received a number of reports of increased costs for building projects over the year. Steps have been taken in each case to minimize those costs, and investigations have also been commissioned to ensure that practice is sound and any pitfalls are avoided.

(ii) The cost of an undergraduate education at Cambridge

Through the PRC, the cost of providing an undergraduate education at Cambridge, using a model for understanding the University's costs, is reviewed annually by a working group which includes student representation. The analysis is subsequently published.²²

(iv) Sustainability metrics

To assist in longer term strategic planning, a set of sustainability metrics has been developed covering the full range of the University's operations. These will allow the Council to track performance over time and make comparisons with peer institutions where comparable data are available. The metrics are consistent with the annual sustainability assurance report (ASSUR) to HEFCE and have been further developed in that context.

(v) Cambridge University Endowment Fund

The majority of the University's long-term financial assets are held in the Cambridge University Endowment Fund (CUEF), which is also open to investment by Colleges and other charities closely linked with the University.

The Investment Board oversees the activities of the University's Investment Office in its management of the CUEF. The Investment Board continues to be chaired by Mr Peter Readman and consists of six other external investment professionals and the Vice-Chancellor. The external members are respected figures from their (different) areas of financial markets, bringing strong insights into the structures and opportunities of those sectors, and capable of bringing ideas and business to the Investment Office. The Board met four times during the year to review investment performance and the portfolio's risk profile; consider the Investment Office's analysis and proposals; and advise on investment opportunities and the management of investments. The regular meetings cover a cycle of work giving particular attention to strategic asset allocation, annual review of manager performance, and focus on specific asset classes. The minutes of the Board's meetings are received by both the Finance Committee and the Council.

The CUEF closed its year with a value of £2,959 million as at 30 June 2017 (2016: £2,656m). A total of £97m was distributed to investors and investing funds for expenditure, equivalent to a yield of 3.6% on opening capital value.

The CUEF's investment return for the twelve months to 30 June 2017 was 18.8%. The Fund has returned an annualized 13.8% return over a rolling five-year period and 10.1% since the inception of the Investment Office, which compares favourably to the Fund's principal benchmarks and its long-term objective of a 5.25% return in real terms.

University employment

(i) People Strategy

The University has launched a new People Strategy, following its approval by the Council and the General

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Board in the Easter Term 2017.²³ The Strategy has been developed to support the mission and values of the University, and makes a clear statement about how the University values and treats its people, and the culture it wishes to foster to achieve and sustain excellence in all areas of teaching, research, and administration. It sets the strategic direction of the HR Division for the next five years, and focuses on four key areas: recruitment; talent management; reward; and a thriving and inclusive community. The People Action Plan sets out projects that will be undertaken to realize these goals. Work is already underway in many of these areas and an outline of what has been achieved in the last academical year is provided below.

(ii) Recruitment

Following the outcome of the referendum on exiting the EU in June 2016, the HR Division's priority has been to provide reassurance and advice to current EEA staff. In Michaelmas Term 2016, four briefings were held and were attended by 560 staff. A recording of these briefings and further FAQs are available on the HR website. The HR Compliance Team continues to assist current EEA staff who have chosen to apply for Permanent Residence and to date has assisted *c*. 500 EEA staff with their applications.

The government has recently published proposals regarding the future status of EEA nationals in the UK and, reciprocally, UK nationals in the EU. These proposals are subject to the unanimous agreement of all 27 EU states and therefore are not definitive at present. The HR Division continues to monitor progress of the negotiations, and in the event that EEA nationals in the UK are required to make applications for documentation of any sort, support and guidance will be provided to ensure all staff hold the required documents before any applicable 'cut-off date'.

A new Recruitment Working Group has been formed and has presented proposals to enable the University to recruit in a flexible and responsive way, with fair and transparent processes, and to provide a positive experience to candidates. A consultation exercise has been conducted with institutions to reform academic appointment arrangements and create

locally arranged selection committees. Proposals will be submitted for approval in the Michaelmas Term. The Group continues to review the recruitment of academic-related and professorial staff and will bring forward proposals in the next academical year.

A new induction website for the University has been developed and was launched in July 2016. This includes comprehensive information for new starters to the University and materials to support Faculties and Departments in delivering effective induction activities.

A new Recruitment Essentials training course promoting best practice and awareness of equality and diversity principles has been developed and piloted and will be launched in the Michaelmas Term 2017, initially for those involved in academic recruitment.

(iii) Talent management

The Cambridge Centre for Teaching and Learning (CCTL) continues to contribute to the educational excellence of the collegiate University by supporting individuals, encouraging innovation, and providing a strategic and operational focus for enhancement. CCTL's work programme is being supported by PPD's Academic Practice Group and the Academic Division's Educational and Student Policy section and is overseen by the General Board and the Senior Tutors' Committee. Further details of the work of the CCTL are provided in the General Board's Annual Report (p. 27).

This year, the portfolio of activities to support researcher development within Schools has been extended to include development activities for postdocs, support for departmental initiatives and collaborative working with the Office for Postdoctoral Affairs (OPdA), and careers and postdoc networks. Initiatives include a new website (www.rdp.cam.ac.uk) which improves the presentation and profile of development opportunities for postdocs and research students, and an increase in the number of short online courses, and piloting improved face-to-face activities.

To contribute to the personal and professional development of staff at all levels, PPD On Demand is being developed to make training resources accessible

²³ https://www.hr.admin.cam.ac.uk/people-strategy.

in a quick and easy way online, including a range of video clips, factsheets, and tips and hints to enhance learning. 'Senior leadership programme levels 1, 2, and 3' have been delivered to 45 senior leaders and 'Leadership essentials' and 'Managing your team through change' have also been delivered to many staff on the open programme. A version of 'Leadership essentials' has been adapted for an academic audience and has been successfully piloted in a number of departments. A range of bespoke sessions have also been delivered in departments and Schools.

Work is underway to provide structured routes to career progression for both academic and professional careers. For academic staff, a review of arrangements for managing academic probation and promotion has been undertaken which has led to the development of an alternative progression model, including an academic career path, revised promotions criteria, streamlined processes, and key principles. The proposals will be considered by the HR Committee in the Michaelmas Term 2017.

In respect of professional staff, and in preparation for the introduction of the Apprenticeship Levy in April 2017, development and planning work has been undertaken to support the increase in take-up of apprenticeships in the University. The University has participated for the first time in the national Ambitious Futures graduate development programme, recruiting three trainees who have made key contributions to their placements. Further work is also underway to increase access to mentoring opportunities for staff in order to further their personal and professional development. A Senior Mentoring Initiative has been piloted this year involving 14 mentoring partnerships drawn from a range of senior leadership roles. Feedback to date has been very positive.

(iv) Reward

A Remuneration Working Group has been formed, chaired by the Pro-Vice Chancellor for Institutional and International Affairs, to review and propose pay and reward policies and procedures which support the University's ability to attract and retain outstanding staff. This group has made progress on

a range of reward topics including pay positioning, external benchmarking, contribution related pay, gender pay, reward and benefits strategy, employee accommodation and housing, internal pay progression, initiatives to support employee financial wellbeing, and the communication of pay and benefits information to employees. Many new projects are underway as a result and will be implemented over the next academical year.

Agreement was reached nationally on the 2017 pay settlement and was implemented from 1 August 2017. The settlement is a 1.7% uplift on all points, save for the first 18 points of the pay spine where larger increases apply.

The 2016 Equal Pay Review was completed successfully and work is underway to progress recommendations to address the University's gender pay gap and to meet the University's obligations under the new mandatory gender pay reporting regulations set by the government.

To respond to changes in the pension environment, a new scheme has been introduced to enable employees adversely affected by pension tax allowances to opt out of future pension provision and apply for an additional cash element in its place, subject to certain eligibility criteria.

The USS Investment Builder (a new USS defined contribution section) was launched in October 2016 following a consultation exercise in 2015. The earnings of members in excess of the USS salary threshold (£55,560 for 2017–18) are automatically pensioned in the Investment Builder. All USS members have the option to pay AVCs to Investment Builder and can elect to receive an employer contribution of 1% to Investment Builder if they pay an AVC of at least 1%. As at 31 July 2017, 1,528 employees had taken advantage of the matching funding.

The results of the triennial valuation of USS as at 31 March 2017 will be considered over the coming months, with a view to finalizing the valuation by no later than 30 June 2018. The University contributed, via UniversitiesUK (UUK), to consultations on the inputs and assumptions to be used in the valuation, in

advance of USS's formal four-week consultation with UUK in September 2017.

The Childcare Office has introduced new government initiatives including thirty funded hours for childcare and the Tax-Free Childcare scheme, with information and support for staff. A ten-year contract has been agreed with the nursery services provider, Childbase Partnership, which has taken both Edwinstowe Close and West Cambridge nurseries to an 'Outstanding' grade with Ofsted (the regulatory body for nurseries) and has undertaken expansion works in both nurseries enabling additional places to be offered to staff. A new nursery on the North West Cambridge site, Eddington Nursery, is due to open in 2018. The Nursery Project Board, chaired by Professor Chris Abell, is progressing options for a fourth University nursery, which is currently at the design stage. The location for this nursery is still under discussion with appropriate parties.

- (v) Thriving and inclusive community
- (a) Equality and diversity

The Equality and Diversity Strategy 2016–21 and Action Plan were approved in December 2016.²⁴ The Strategy incorporates five key objectives which also serve to meet compliance requirements under the Equality Act 2010. Priorities are to increase diversity at senior levels, to progress gender equality and address the gender pay gap, to address disadvantage in student learning, to ensure inclusion, and to increase best practice. These objectives have been advanced this year via the following initiatives:

- Preparatory work for the Athena SWAN silver submission in November 2017, to share practice and expertise.
- Work has commenced on the University's Bronze
 Race Equality Charter application, due in July
 2018, including surveys and workshops on race for
 staff and students, which have been well received.
- Successors have been identified for the Gender Equality Champions (STEMM and AHSS), and the Race and Inclusion Champion for 2017–20.

- Research undertaken into the gender pay gap has identified complex contributory factors and possible ways of addressing these, which are now informing and being embedded into core HR business. Progress was presented at the Annual Vice-Chancellor's Equalities Review in July 2017.
- Cultural change events held in 2017 include the Annual Race Lecture and Black History Month, Holocaust Memorial Day, International Women's Day, WiSETI Lecture, LGBT+ History Month, and mental health in the LGBT community.
- New training modules launched this year include Unconscious bias, an online training module with over 300 participants to date. Where to draw the line face-to-face training has been developed in collaboration with UCL and Oxford and Manchester Universities. This training goes hand-in-hand with broader work on harassment and sexual misconduct as part of a campaign, Breaking the Silence, underpinned by a new University statement of zero-tolerance and other policies and procedures working towards clarity of professional boundaries and good conduct.
- The Whistleblowing Policy has been updated to accurately reflect the requirements of the Public Interest Disclosure Act 1998 and to provide a number of important clarifications.
- The introduction of a new pilot employee benefit
 My Family Care in May 2017 offering support to
 staff in finding emergency care for dependents.
 A new advice, consultation, and networking
 initiative SPACE (Supporting Parents and Carers at
 Cambridge) was formally launched in July 2017.

b) Wellbeing

A range of wellbeing initiatives have been introduced this year including the 2017 Festival of Wellbeing, which delivered over 50 events to nearly 1,000 participants. This event is to become part of the University's broader Health and Wellbeing Operations Group, embedding and extending this initiative across the University's annual calendar.

²⁴ http://www.equality.admin.cam.ac.uk/files/ed_strategy_report_with_cover_2016-2021.pdf.

Other health and wellbeing initiatives implemented this year include the development of the following: Wellbeing Advocates in departments across the University to be trained in the Michaelmas Term; a new Wellbeing website for staff and related promotional materials; a programme of lunchtime sessions for all staff during 2017–18 on topics related to mental health and managing work demands; and greater support for disabled staff.

(c) Postdoctoral affairs

In 2016–17, the Office of Postdoctoral Affairs (OPdA) has seen a significant increase in its activities and engagement consistent with the University's vision and on-going commitment to develop support, broaden horizons, and provide new opportunities for postdocs.

The new Postdoc Centre at the Biomedical Campus opened in September 2016, enabling the 900 postdocs based there to run events and talks, and has provided much-needed working and networking space. The Clinical School Postdoc Committee has taken full advantage of the opportunity to expand its activities. The Mill Lane Centre continues to attract greater numbers and hosted 700 events and activities in 2016-17. The new Eddington (NWC) Postdoc Centre opened in September 2017 as a bespoke and permanent home for OPdA and the nearly 1,000 postdocs based to the north and west of the city and in local key worker housing. This development is a validation of the success of the centre model.

The strong and mutually beneficial relationships with other University services continue to flourish, and many Colleges now offer, via a designated convenor, a diverse set of fellowship and affiliation opportunities for postdocs.

In May 2017, the OPdA launched a three-year entrepreneurial training programme, in partnership with four other EU universities and four industrial partners, funded by the Isaac Newton Trust and the various partners. A range of novel opportunities have been launched as a result of this partnership and in collaboration with the Cambridge Judge Business School, Cambridge Enterprise, IdeaSpace

and the Institute for Manufacturing's Education and Consulting Services.

The Entrepreneurial Postdocs of Cambridge Society (EPoC) ran a successful programme of entrepreneurial events and talks (including from Google Ventures and IndieBio) and now has an active mailing list of over 600 postdocs.

The Postdoctoral Matters Committee (PMC) was established this year and reports directly to both the Council and the General Board. The PMC is responsible for the strategic vision and oversight of the OPdA which sits operationally within Human Resources.

The PDoC Society continues to flourish and in the Michaelmas Term 2017 will launch the first National Postdoc meeting with over 100 postdocs from across the country expected to attend. The OPdA also continues to support the work of Researcher 14, a network jointly established by Cambridge and Imperial College in 2014 representing 65% of the 45,000 UK research staff postdoc community. Current work streams include a review of the Concordat to support research integrity, an expansion of mentoring across the partnership, postdocs and teaching, and best practice in local postdoc representation.

The Borysiewicz Fellowship Scheme in Medical and Biological Sciences will recruit Fellows in the Lent Term 2018 and will comprise a training programme around multi-disciplinary teamwork, leadership, and entrepreneurship. It is envisaged that this will better support identification of future leaders and can be expanded, with additional funding, to offer a wider programme across other disciplines.

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20 November 2017 Stephen Toope, Vice-Chancellor

Ross Anderson Richard Anthony R. Charles Stephen J. Cowley Daisy Eyre Anthony Freeling Nicholas Gay David Greenaway Nicholas Holmes Alice Hutchings Darshana Joshi Fiona Karet Umang Khandelwal Stuart Laing Mark Lewisohn Susan Oosthuizen Michael Proctor Pippa Rogerson John Shakeshaft Susan Smith Sara Weller Mark Wormald Jocelyn Wyburd

ANNEX A

Council membership 2016-17

Council members (other than *ex officio* and student members) serve for four years from 1 January in two cohorts; the text formatting reflects those cohorts. Student members of the Council serve for one year from 1 July.

The Chancellor and the Vice-Chancellor

Elected as Heads of Colleges

Professor Michael Proctor, K

Professor Ian White, JE (to 18 July 2017)

Mr Stuart Laing, CC

Professor Susan Smith, G

Dr Anthony Freeling, HH (from 19 July 2017)

Elected as Professors or Readers

Professor Anne Davis, K (to 31 December 2016)

Professor Fiona Karet, DAR

Professor Ross Anderson, CHU

Dr Susan Oosthuizen, W

Professor Nick Gay, CHR (from 1 January 2017)

Elected as members of the Regent House

The Reverend Jeremy Caddick, EM (to 31 December 2016)

Dr Margaret Glendenning (to 31 December 2016)

Dr David Good, K (to 31 December 2016)

Dr Rachael Padman, N (to 31 December 2016)

Dr Richard Anthony, JE

Dr Ruth Charles, N

Dr Nicholas Holmes, T

Dr Alice Hutchings

Dr Stephen Cowley, EM (from 1 January 2017)

Dr Pippa Rogerson, CAI (from 1 January 2017)

Dr Mark Wormald, PEM (from 1 January 2017)

Ms Jocelyn Wyburd, CL (from 1 January 2017)

External members

Professor Dame Shirley Pearce (to 31 December 2016)

Ms Sara Weller

Mr Mark Lewisohn, CHR

Mr John Shakeshaft, T

Professor Sir David Greenaway (from 1 October 2017)

Student members

Mr Chad Allen, K (to 30 June 2017)

Mr Amatey Doku, JE (to 30 June 2017)

Ms Umang Khandelwal, N

Ms Daisy Eyre, JE (from 1 July 2017)

Ms Darshana Joshi, HH (from 1 July 2017)

ANNEX B

Statement of primary responsibilities

The Council has adopted this Statement of Primary Responsibilities.

The principal responsibilities of the Council are defined by University Statute A IV 1 which reads:

- (a) The Council shall be the principal executive and policy-making body of the University. The Council shall have general responsibility for the administration of the University, for the planning of its work, and for the management of its resources; it shall have power to take such action as is necessary for it to discharge these responsibilities. It shall also perform such other executive and administrative duties as may be delegated to it by the Regent House or assigned to it by Statute or Ordinance.
- (b) The Council shall have the right of reporting to the University. It shall advise the Regent House on matters of general concern to the University.
- (c) The Council shall make an Annual Report to the University, and shall initiate and submit a Grace for the approval of the Report by the Regent House.
- (d) The Council shall have the power of submitting Graces to the Regent House and to the Senate. The procedure for the submission of Graces shall be prescribed by Special Ordinance.
- (e) The Council shall oversee the work of all those institutions in the University which are placed under its supervision, and shall ensure that the University officers assigned to those institutions are satisfactorily performing the duties and fulfilling the conditions of tenure of their offices.

Moreover, the Council shall perform such duties in connection with financial matters as are assigned to it by Statute F I.

Pursuant to these responsibilities the Council:

- through its Finance Committee, its Audit Committee, and the Planning and Resources Committee, ensures the University's accountability for the proper use of public funds;
- supervises the financial position of the University through its statutory Finance Committee;

- oversees the investment management of the Cambridge University Endowment Fund through its Investment Board;
- arranges audit through its statutory Audit Committee;
- conducts legal business and ethical scrutiny, especially in respect of the acceptance of benefactions and investment responsibility, through its Advisory Committee on Benefactions and External and Legal Affairs;
- discharges its responsibilities in relation to the University as an employer through the Human Resources Committee (HRC), a joint Committee with the General Board;
- develops University policy on the advice of the General Board and that of specialist advisory bodies;
- conducts planning and resource allocation through the Planning and Resources Committee (PRC) and the Resource Management Committee (RMC), both joint Committees with the General Board;
- deals with business about buildings and the University estate with the advice of the Buildings Committee (a joint Committee which reports through the PRC), and on the advice of the Finance Committee;
- informs and advises the Regent House through Reports, Notices, and Graces, and through considering remarks made at Discussions;
- conducts the University's relations with government, regulatory bodies (including HEFCE and OFFA, to be replaced by the Office for Students, and UK Research and Innovation), other national bodies, and local and regional bodies, responding on behalf of the University to consultations and other matters as required under UK legislation;
- supports and advises the Vice-Chancellor and, either through her or him or directly, the Pro-Vice-Chancellors;
- supervises University institutions placed under its supervision, particularly through receiving reports, and also through the PRC and the HRC;
- through the Finance Committee and the Press and Assessment Board exercises financial and some

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other supervision of Cambridge University Press, the Local Examinations Syndicate (Cambridge Assessment), University-owned companies, and some free-standing bodies such as the Cambridge scholarship trusts;

- pursuant to Act of Parliament, discharges responsibilities for the University Student Unions through its Council Committee for the Supervision of the Student Unions;
- makes (or recommends) senior appointments (including the Vice-Chancellor, Pro-Vice-Chancellors, the Registrary and, through its Standing Appointments Committee established by Ordinance, Directors and other senior staff in the Unified Administrative Service);
- monitors risk management, emergency management, and value for money surveillance;
- monitors the implementation of major projects, through special groups and the Information Services Committee, and the West and North West Cambridge Estates Board;
- through the work of the Information Services Committee, monitors the provision of IT infrastructure and support;
- oversees strategy concerning the postdoc community through its Postdoctoral Matters Committee, a joint committee with the General Board;
- keeps University governance and similar matters under review;
- makes a statutory annual report to the University;
- · monitors its own performance and effectiveness.

The Council has published the following statement (*Statutes and Ordinances*, p. 112):

Notice by the Council

Statement of intention

In carrying out their functions as the principal executive and policy-making body of the University the Council will consult the Regent House on questions of policy which in the Council's judgement are likely to prove controversial. They will do this by submitting a Grace to the Regent House for the approval of a

provisional decision or statement of intention; where appropriate, such a Grace will allow for the expression of a preference between alternative options. The Council will give consideration to remarks made at any Discussion of such matters and to the outcome of any vote on them.

Annual Report of the General Board to the Council

for the academical year 2016–17



Annual Report of the General Board to the Council for the academical year 2016–17

1. Introduction

The General Board presents this Annual Report on its work for the academical year 2016–17. The Board draws particular attention to the following major activities that have engaged the Board and its Committees during the year:

Higher education landscape

- the Higher Education Act, including the introduction of the Teaching Excellence Framework [section 2(i) and 2(ii)];
- a consultation on the Research Excellence Framework [section 2(iii)];

Education

 a review of student conduct, complaints, and appeals [section 3(ii)];

Research

- •a programme of Strategic Research Reviews [section 4(iii)];
- •strengthening collaborative research partnerships [section 4(ii)].

2. The higher education landscape

(i) Higher Education and Research Bill

The University continued to participate fully in developing the Higher Education and Research Bill during 2016–17 and the Higher Education and Research Act received Royal Assent on 27 April 2017.

The University responded to a Department for Education consultation on registration fees which registered Higher Education providers would pay to the Office for Students (OfS), it stated its objection to the principle of charging subscription fees, and challenged some of the detailed proposals outlined in the consultation.

(ii) Teaching Excellence Framework

In November 2016, the Board considered a case for participation in the Teaching Excellence Framework

(TEF2), together with an open letter from CUSU voicing concerns about the University's participation in TEF2. Whilst the Board acknowledged that there were some reservations about the metrics to be used in the TEF, it agreed that it would be better to engage constructively with the assessment process and to use that engagement to develop and improve TEF in the future. The General Board and the Council subsequently approved a recommendation that the University should participate in the Teaching Excellence Framework 2 (TEF2), with the student members of the General Board and the Council dissenting.¹

The University's submission to TEF2 was prepared under the oversight of the Board's Education Committee, in consultation with the Senior Tutors' Committee and the Colleges' Committee. The submission comprised a 15-page narrative to be considered alongside metrics and other contextual data and was submitted in January 2017.

The outcome of TEF2 was announced in June 2017, with the University being awarded Gold. In particular, the University was commended for its supervision system; opportunities for undergraduates to undertake research projects alongside world-leading academics; the provision of facilities which provide a world-leading learning environment; the rigour and stretch of courses; the inclusive and individualized support services for disadvantaged groups of students; and a Careers Service which allows students to tailor work experience to their needs.

The General Board is aware that the Department for Education and HEFCE are considering additional metrics relating to teaching intensity, and that a subject-level TEF will be piloted in 2017–18. The Board will continue to monitor developments with the TEF through its Education Committee during 2017–18.

(iii) Research Excellence Framework

In October 2016, the Board considered the report of the Stern Review, Building on Success and Learning from Experience, An Independent Review of the Research Excellence Framework, which was published by the Department for Business, Energy, and Industrial

¹ Reporter, 6449, 2016–17, p. 270.

Strategy on 28 July 2016. The Board welcomed some of the proposals in the report, which reflected a number of the key elements of the University's submission to the consultation.

HEFCE launched a consultation on the Research Excellence Framework (REF) early in 2017. Whilst the University had been broadly supportive of the proposals in the Stern Review, it was recognized that there was unlikely to be consensus from the sector in response to the implementation of the proposals. A University-wide consultation was undertaken, which revealed a diverse range of views on the REF proposals.² In March 2017, the Board approved the University's response to the consultation on the REF, which supported the main proposals set out in the Stern Report. In particular, the University's response agreed that the link between individual researchers and research outputs should be broken; and made recommendations about the number of research outputs to be submitted for individual researchers (a minimum of zero and a maximum of six for an individual researcher, with an average of two outputs per submitted member of staff).

(iv) Other national consultations

The Board, through its Education Committee and in collaboration with the Colleges, prepared a robust response to the government's Education Green Paper, Schools that Work for Everyone. The response rejected the proposal that universities would be required to sponsor schools as a condition of their Access Agreements. The basis of the rejection was that the collegiate University wished to continue engaging with schools across the country, and not to be limited to individual schools.

Through the Research Policy Committee, the Board also prepared an institutional response to the government's Industrial Strategy Green Paper, *Building Our Industrial Strategy*. The University was broadly supportive of the Industrial Strategy, but highlighted five key points in its response: the importance of knowledge transfer; the importance of integration; the importance of support; the importance of skills and infrastructure; and the importance of diversity. The University also worked

with a number of partners in the local area to develop a separate regional response to the consultation, which focused on the need for investment in housing and transportation infrastructure.

3. Education and the learning environment

(i) Student wellbeing and experience

During 2016–17, a range of initiatives relating to student wellbeing and the student experience have been explored, co-ordinated through the Board's Education Committee and other sub-committees. The Student Health and Wellbeing Committee, working with the Senior Tutors' Committee, produced a guide for staff in Faculties and Departments who support students. This guide provides information on when to refer students with mental health difficulties, and describes staff responsibilities under the Prevent Strategy.

In July 2017, the Board approved a new University policy to safeguard students studying and working away. The policy was informed by experiences and lessons learned from across the University, and has been designed to cover a range of different working-away situations proportionately and sensibly. The new policy requires a change to existing procedures, and a new system to enable processes to work more effectively. The development and delivery of the new policy and associated system will take place during 2017–18.

In relation to inclusive teaching, two pilots were conducted under the Board's Digital Education
Strategy, which was approved in 2015–16. A pilot scheme for lecture capture was trialled in a number of Departments, and was considered to be a success. The Information Services Committee therefore agreed to consider proposals for a production service to be rolled out. A second pilot scheme, concerning digital examinations, was initially trialled for preliminary examinations in the History and Classics Tripos. This pilot scheme will be extended during 2017–18. Further work will be undertaken in 2017–18 to implement recommendations in a report on inclusive teaching prepared by the Disability Resource Centre.

In January 2017, the Board approved a Strategy for

² Reporter, 6449, 2016–17, p. 270.

Sport, which had been developed in consultation with junior and senior members of sports clubs and the Colleges. The Strategy highlighted priorities for sport, which the Board recognized as playing an important part in wellbeing and general health of the University community. The University Sports Committee, a joint committee of the Council and the General Board, will continue to review progress against the strategy during 2017–18.

(ii) Student conduct, complaints, and appeals

The General Board and the Council approved a Joint Report on Procedures for Student Complaints and Reviews³ for implementation from 1 October 2017. These procedures deal with student complaints, requests for examination review, and reviews of decisions on individual student applications made by other committees and boards. The changes proposed in the Report included the development of new and simplified procedures to ensure compliance with the Office of the Independent Adjudicator's (OIA) Good Practice Framework. Each procedure includes explicit timeframes for each stage and clearly explains what students can expect.

In April 2017, the General Board and the Council approved a Joint Report introducing a procedure for handling cases of student harassment and sexual misconduct,4 which includes a code of conduct for students. New webpages promote these procedures and provide guidance for students and student-facing staff.⁵ Staff have been offered a briefing session, delivered in partnership with Rape Crisis, to ensure they are appropriately handling student disclosures of sexual violence. These sessions will continue in 2017–18. In addition to reporting through the new procedure, students, staff, and visitors to the University can anonymously report harassment, hate crime, or sexual misconduct. The anonymous reporting began in April 2017; 93 reports have been received to date. A newly created post of University Sexual Assault and Harassment Advisor at the Student Counselling Service will provide support and advise students who have been subjected to harassment or sexual assault.

A collaborative project on preventative actions, match-funded by HEFCE, involves CUSU, the GU, the Sports Service, Equality and Diversity, the Office of Student Conduct, Complaints, and Appeals (OSCCA), the Student Counselling Service, and the Colleges. The project trials and evaluates a number of initiatives including an online training package on consent; consent workshops; a bystander programme is being piloted in Colleges; training for College and University staff by Rape Crisis; and work with sports clubs on gender issues.⁶ Evaluation of the initiatives is being undertaken by the student group, The Cambridge Hub, and will be completed by May 2018.

The University has produced a statement on harassment and sexual misconduct, as well as guidance on consensual student-staff relationships. It continues to work on better procedures for handling staff-student/student-staff harassment and sexual misconduct.

(iii) Public display of class-lists

A ballot on the recommendations in the Report proposing the discontinuation of the public display of class-lists outside the Senate-House and in Colleges and University institutions was held in Michaelmas Term 2016. As a result of the ballot, the Grace was not approved. To comply with new government legislation, proposals concerning the publication of class-lists are in development and will be considered further through the Education Committee in 2017–18.

(iv) Postgraduate student numbers

At the Board's Away Day in Easter Term 2017, Heads of Schools were asked to present their plans for postgraduate education, with a particular focus on postgraduate recruitment numbers and the University's fundraising plan for securing postgraduate funding. A Memorandum of Understanding between the University and the Colleges on postgraduate student numbers has been approved, which sets out the aim for a 13.1% growth in postgraduate student numbers over the next four years.

³ Reporter, 6469, 2016–17, p. 628.

⁴ Reporter, 6445, 2016–17, p. 132.

http://www.studentcomplaints.admin.cam.ac.uk/harassment-sexual-misconduct.

⁶ http://www.studentcomplaints.admin.cam.ac.uk/harassment-sexual-misconduct/ prevention-and-support-initiatives.

⁷ Reporter, 6449, 2016–17, p. 283.

Further work to review and restructure committees with responsibility for graduate recruitment and funding is ongoing, under the oversight of the Postgraduate Admissions Committee (PAC) and in collaboration with CUDAR.

(v) Student experience surveys

The National Student Survey (NSS) has been capturing final-year undergraduate students' feedback on course experience since 2005. In 2016, the overall satisfaction rate in the NSS remained at 90%, putting Cambridge University second in the Russell Group (behind Exeter and equal with Leeds, Newcastle, Oxford, and Queen's University Belfast). Satisfaction with assessment and feedback continues to be one of the lower scoring areas, both for the University and across the sector. The Education Committee's Examination Review (conducted jointly with the Board of Examinations; see section (*ix*)) intends to make recommendations on providing improved feedback on examinations to students.

The University's NSS response rates for 2017 were impacted by CUSU's boycott of the survey, because of the use of NSS data as a metric for TEF and the subsequent link between TEF and the inflationary increase of fees. Cambridge was not the only university to be affected by a boycott of the NSS. As a result, a complete dataset of the University's NSS results will not be made publicly available, nor will the data be made available to those who compile university league tables. It is, as yet, unclear what the impact will be on future iterations of the TEF. In the Postgraduate Taught Experience Survey (PTES), overall satisfaction with postgraduate teaching dropped one percentage point to 81%, and nine out of the thirty-seven courses covered by the survey received 100% satisfaction scores. The University scored higher than the Russell Group on questions relating to dissertation, resources, and organization; however, assessment and feedback remained as the lowest scoring category for the University.

As in previous years, and in line with the Board's ambitions to improve scores, Departments and Faculties with the lowest-scoring courses have met

with the Pro-Vice-Chancellor (Education) to discuss improvements. Ensuring quality of courses remains a key priority, and the Board is aware of the intention to introduce a National Student Satisfaction Survey for taught Master's degree courses and the potential for postgraduate taught survey metrics to be used in the future for the Teaching Excellence Framework (TEF).

For the first time, an alternative student experience survey, the Student Barometer, was trialled during Michaelmas Term 2016 with first- and second-year undergraduates, and taught postgraduate students. The pilot was considered to be successful in providing good student feedback in relation to teaching and learning, as well as general feedback on the student experience. The Education Committee therefore agreed during Easter Term 2017 that it would no longer participate in the PTES and Postgraduate Research Experience Survey (PRES) and would instead participate in the Student Barometer Survey. The intention is to survey all students at the University on an annual basis, with the exception of final-year undergraduates, who would continue to complete the National Student Survey only.

(vi) Learning and teaching excellence

The Academic Division's Educational and Student Policy team has continued to collaborate with Personal and Professional Development's Academic Practice Group to develop and deliver a work programme for the Cambridge Centre for Teaching and Learning (CCTL). CCTL aims to contribute to the educational excellence of the collegiate University by supporting individuals, encouraging innovation, and providing a strategic and operational focus for enhancement. During 2016–17, CCTL successfully introduced the Postgraduate Certificate in Teaching and Learning in Higher Education; co-ordinated the University's second Teaching Forum; co-ordinated the annual meeting for Directors of Teaching; piloted an extended course which combines theory with reflective practice for experienced supervisors of undergraduate and postgraduate students; and co-ordinated the University's Pilkington Prize Scheme for Teaching Excellence.

(vii) HEFCE Accountability Return

Under HEFCE's new Operating Model for Quality Assurance, the HEFCE Accountability Return had been revised to require all university governing bodies to provide assurances about the quality of their higher education provision. The Board submitted a report to Council in November. This report allowed the Council to confirm to HEFCE that: (a) it had received a report on the continuous improvement of the student academic experience; (b) that the methodologies used as the basis to improve the academic experience were robust; and (c) that the standards of awards were appropriately set and maintained. The Accountability Return was submitted to HEFCE with Council's approval. HEFCE subsequently confirmed that it had no concerns about quality or standards of the University's provision.

(viii) Learning and Teaching Reviews

As part of the Board's rolling programme of Learning and Teaching Reviews, the following institutions were reviewed in 2016–17: the Faculties of English, History, and Mathematics; the Institute for Sustainability Leadership; and the Departments of Pathology and of Materials Science and Metallurgy.

A review of the programme of Learning and Teaching Reviews will take place, in the light of HEFCE's expectations under a revised operating model for quality assessment. The Education Committee considered and approved proposals for the introduction from 2017–18 of a New Programme Review scheme, a revised Annual Programme Review, and possible amendments to the Learning and Teaching Review process. The intention is that the new processes would allow key information to be collected in a more streamlined process and place a greater focus on student outcomes in line with HEFCE expectations.

(ix) Examinations review

The Examination Review Working Group has completed a fundamental and comprehensive review of examination processes, policies, and strategies. The review was established by the General Board's Education Committee and the Board of Examinations. The report

and recommendations from the Working Group will be considered during Michaelmas Term 2017.

As part of the recommendations from the Working Group, the Education Committee undertook a consultation on the introduction of an overall degree classification. A further working party will be established to develop detailed proposals concerning the introduction of an overall degree classification for the Tripos, with a view to preparing a Report for consideration by the Board during 2017–18.

(x) Widening access and participation

The University successfully negotiated with the Office for Fair Access (OFFA) a new access agreement for 2018-19. This agreement covers the following undergraduate admissions targets: a state sector target of 64%; a target of 13% for students from POLAR3⁸ guintiles 1 and 2 (i.e. the 40% of postcodes which have the lowest participation rates in higher education); a target of 8.2% for students from Output Area Classification⁹ (OAC) super groups 7 and 8 and groups 3a, 3b, 3c, and 4b; a target of 8.5% for students from IMD deciles 1, 2, and 3; a minimum commitment to offer 600 places on summer schools each year; a non-continuation target of 2.1%; and a commitment to launch long-term outreach programmes to engage Black and Minority Ethnicity students and raise attainment in secondary schools.

In addition, the Cambridge Admissions Office has expanded its research unit to assist with the development and evaluation of the University's admission and access policy; this function will prove pivotal in future dealings with OFFA and policy makers. The University is also leading a consortium of local universities (Anglia Ruskin University, the University of East Anglia, the University of Suffolk, and Norwich University of the Arts), which has been successful in securing £9m of HEFCE funding over two years to deliver the National Collaborative Outreach Programme in East Anglia. This programme aims to increase the number of young people from disadvantaged backgrounds in higher education by 2020. The Cambridge Admissions Office is supporting

⁸ https://www.hefce.ac.uk/analysis/yp/POLAR/. Note that the measure is now in its third iteration. Previously targets have been determined using POLAR2; now they are being expressed as POLAR3. This leads to some small variances in the figures used.

Output Area Classification (OAC) is a geodemographic segmentation system produced by the UK Office for National Statistics: http://www. opengeodemographics.com.

other institutional strategic aims through the establishment of an international recruitment team, which has initially focused on developing markets in North America and India.

(xi) Establishment of degrees and courses

In 2016–17, the Board agreed to rescind the Medical and Veterinary Sciences Tripos (MVST) and approved the introduction of two new Triposes, the Medical Sciences Tripos and the Veterinary Sciences Tripos, with effect from October 2018. The Board was supportive of the academic rationale for the split, which also had the support of the General Board's Education Committee, the Faculty Board of Biology, the Medical Education Committee, Veterinary Education Committee, the MVST Part I Committee, the Senior Tutors' Committee, and the Undergraduate Admissions Committee.

The Board agreed to establish a new Master of Accounting Degree, an M.Res. Degree in Cancer Biology, and an M.St. Degree in Entrepreneurship. It also approved an agreement between the Institute of Criminology and the Hong Kong Police Force to offer part of the residential block for the M.St. Degree in Applied Criminology and Police Management in Hong Kong.

4. Research

(i) Research income

The University has sustained its performance in research income in 2016–17 with income in excess of £465 million. The research funding environment continues to be highly competitive both within the UK and internationally and the University continues to monitor its funding performance closely, in particular to assess any adverse impacts arising from the result of the EU referendum. The University's research funding performance has remained robust across the board, including from the European Research Council (ERC).

Performance in terms of the value of new grants and awards was strong, and included the establishment and renewal of a number of major research Centres, including the National Research Facility for

Infrastructure Sensing, the Gurdon Institute, the Wellcome/MRC Stem Cell Institute, the Cambridge University Hospital Partnership Biomedical Research Centre, the Sir Henry Royce Institute for Materials Science Research and Innovation, and the Leverhulme Centre for the Future of Intelligence.

(ii) Research landscape and partnerships

The University has contributed to the developing plans for the future of the Research Excellence Framework (REF) through its response to the HEFCE consultation in the plans for implementation of the Stern Review. It also continued its programme of engagement with major funding bodies and agencies. A major focus for 2016–17 has been dialogue with all key stakeholders, including the European Commission, on the implications of the UK's withdrawal from the European Union. Alongside these discussions, the University hosted a major series of events, including a visit from the President of the European Research Council as part of the week of celebration of the first ten years of the European Research Council (ERC).

The Board has overseen the University's participation in the development of a number of new research initiatives, including Research Council-led programmes to establish national research institutes. Building on the experience gained from the University's role as one of the founding members of the Alan Turing Institute, the Board has approved the University's role as one of the national hubs of the Sir Henry Royce Institute and the Dementia Research Institute; the Board also approved in principle its anticipated role in the Rosalind Franklin Institute.

(iii) Strategic research reviews

The Board approved a programme of Strategic Research Reviews to take place over three years from 2015–16. The reviews are designed to support the further development of the research environment at Cambridge and there has been good progress on the delivery of this programme of reviews during 2016–17, including reviews of Physics, Sociology, Music, Earth Sciences, Geography, Education, and Mathematics.

¹⁰ Reporter, 6447, 2016–17, p. 189.

Annual Report of the General Board to the Council for the academical year 2016–17

The Strategic Research Review programme has also extended some of the University's Non-School Institutions, through a combined review of the Department of History of Art, Kettle's Yard, and the Fitzwilliam Museum. Recommendations from the reviews will be considered by the Board in conjunction with the Schools.

(iv) Strategic research initiatives and networks

The University's programme of Strategic Research Initiatives (SRIs) and Networks has continued to provide a key focus to build critical mass of multidisciplinary research expertise from across the Schools. The Research Policy Committee (RPC) is continuing to implement its process to support the transition of successful SRIs to a University Interdisciplinary Research Centre status. The RPC also began a process to seek to establish a further three new SRIs to start work in 2017–18.

(v) Preparations for the Research Excellence Framework 2021

The Board has overseen the ongoing process of implementation of revised policies and procedures required to comply fully with the requirements of HEFCE and other funding agencies, including preliminary work to put in place the management and governance arrangements for the University's preparations for REF2021.

(vi) Research integrity

The University has published its third Annual Statement on Research Integrity in accordance with the requirements of the Research Integrity Concordat.¹¹ Compliance with the Concordat requires the University to maintain and continually improve the University's policies, processes, and systems for developing good research practice and cultivating a culture of research integrity. The University Research Ethics Committee (UREC) has oversight of the University's research ethics and governance systems and reports annually to the Research Policy Committee (RPC) and the Board.

(vii) Research administration review

The Board received the report and recommendations from the first phase of a review of research

administration, together with a further interim progress report in Lent Term 2017. Further updates will be considered by the Board during the 2017–18 academical year.

5. External and international engagement

(i) Creation of the Strategic Partnerships Office

The University is establishing a new Strategic Partnerships Office (SPO) to maximize private and international public sector partnership opportunities. A principal objective of the new structure is greater co-ordination of international and corporate/business activity across the academic University. The SPO will comprise three sections:

Corporate and Business Relations:

to help co-ordinate business relations, provide an entry point for external stakeholders, and develop a strategic approach to working with industry.

Public International Partnerships:

to continue the work of the International Strategy Office in working with higher education and research institutions, governments, funders and non-governmental organizations (NGOs).

International Support Service:

a 'one-stop-shop' source of technical advice and guidance for partnership development overseas.

(ii) International strategy

The International Strategy Committee (ISC) developed a strategic framework for the University's international engagement, which states that deeper engagement will be focused on countries and regions where the University already has a critical mass of collaborations (e.g. the United States of America, Singapore, India, and Africa). The strategic framework will be reviewed following the development of the Strategic Partnerships Office and will be considered by the General Board and the Council during the 2017–18 academical year.

Following the outcome of the UK referendum to leave the European Union (EU), a number of strategies were

http://www.research-integrity.admin.cam.ac.uk/research-integrity/research-integrity-statement.

proposed to ensure that the University maintains and enhances its position as the external environment changes in the lead up to, and following, the UK's exit from the EU. Strategic responses were proposed in four areas: students; staff; research funding; and global reputation and reach. However, considerable uncertainty remains around the future relationship between the UK and the EU.

Specific developments of note during 2016–17 were as follows:

Europe:

The arrangements for the establishment of a Max-CAM Max Planck Cambridge Centre for the Study of Ethics, Human Economy, and Social Change in the field of socio-cultural anthropology were finalized. The Centre will open in Michaelmas Term 2017.

India:

The University continued to develop its partnerships in India, including a series of events and activities led by the Cambridge Museums and Botanic Garden for 'India Unboxed', to mark the UK-India Year of Culture 2017. Two major research collaborations led by the University were awarded almost £15 million in funding from the Global Challenges Research Fund, focusing on food security in India and public health in Bangladesh.

Africa:

The University's engagement with Africa was highlighted in the February 2017 edition of *Research Horizons*, including the Cambridge-Africa programme and the work of the twenty-five Cambridge-Africa scholars.

Global Alliance:

A second round of funding for Global Alliance projects in Smart Systems, Cities, and Precision Medicine was launched. Proposals for joint research projects have been developed by academics across the three institutions and successful bids will be selected for funding in Michaelmas Term 2017.

6. Human resources

The General Board oversees employment matters through the Human Resources Committee, a joint Committee of the Council and the General Board. In order to reduce repetition between the two reports, further detail on University employment is provided in the Annual Report of the Council in 2016–17, and is submitted on behalf of the Council and the General Board (p. 16).

7. Occupational health and safety

The Occupational Health and Safety Service (OHSS) is within the Division of Health, Safety, and Regulated Facilities, which includes University Biomedical Services as a separate operational department. This has enabled efficiencies to be made in complementary areas of governance and compliance. The OHSS continues to prioritize the provision of risk-focused support services, helping to ensure that the University's operations remain compliant while identifying areas of improvement by regular auditing, inspection, and review, with ongoing reporting to the Consultative Committee for Safety and the Health and Safety Executive Committee.

Demand for the Occupational Health Service has continued to experience an unprecedented increase in the number of referrals of University staff requiring appointments, resulting from both self-referrals and management referrals. There has been a 43% increase in the number of self-referrals and management referrals in the past five years. In addition, appointments for statutory health surveillance associated with work-place hazards continue to rise. Data indicates that this is due to University HR initiatives, an increase in the complexity of cases referred to the Service, and the scale of the increase in the number of staff members at the University by transfer from other organizations. Although prioritization and targeting of resources has helped to accommodate the pressure on resource, maintaining the required service provision is not possible under current Chest budgetary constraints, with temporary arrangements to cover clinical needs leading to a

recurrent budgetary overspend. Regardless, feedback for the service remains very positive.

Demand for the Staff Counselling Service has also increased again in 2016-17, by 27% on 2015-16, despite efficiencies being implemented in the service. This is again due to an increase in the number of referrals made and an increased number of more complex cases. The number of counsellors has been increased to accommodate this need. However, this has led to a recurrent budget deficit. New programmes and initiatives for the promotion of mental health and wellbeing have been developed and progressed within current resource limitations, in collaboration with other University stakeholders, with an aim of building staff resilience. Feedback for this work has remained very positive. Staff counselling services are also being made available to College staff from September 2017, as a chargeable service, following a feasibility study that identified the need for this provision and the development of a cost recovery business model.

The Safety Office continued to monitor and manage health and safety compliance across all sectors of the University via its auditing and inspection schedule, provision of professional advice, accident and incident monitoring, policy review and development, administration of the Health and Safety Committee structure, and a comprehensive training programme. New areas of activity have included significant involvement with the Wellbeing agenda (WellCam), development of procedures for risk assessment for travelling abroad, and increased involvement with strategic security.

Contracts held by OHSS for specialized services, including hazardous waste disposal, were renewed on the basis of continued high quality service to Departments, assured compliance with statutory requirements, and value for money. This has more recently included contracts with specialized security advisers in support of the new policy on teaching and research activities outside of the UK. The Safety Office provision of electrical safety testing of portable equipment is to end, with Departments sourcing this from external companies. The provision of chargeable services to Colleges continues, although staff number reductions have required this to be limited in scope.

8. Planning and resource allocation

The General Board oversees planning and resource allocation matters through the Planning and Resources Committee (PRC), a joint Committee of the Council and the General Board. In order to reduce repetition between the two reports, further detail on the University's resources is provided in the Annual Report of the Council in 2016–17, and is submitted on behalf of the Council and the General Board (p. 14).

9. Other

(ii) New Professorships

The Board proposed the establishment or reestablishment of the following senior positions, in some cases supported by generous benefactions or other external funds:

- Professorship of Cancer Sciences
- Professorship of Cell Biology
- · Professorship of Clinical Microbiology
- Jennifer Ward Oppenheimer Professorship of Deep History and Archaeology
- Sir Evelyn de Rothschild Professorship of Finance
- Dr John C. Taylor Professorship of Innovation
- Professorship of Oncological Imaging
- Professorship of Organic Chemistry
- · Bennett Professorship of Public Policy

1 November 2017

Stephen Toope, Vice-Chancellor Philip Allmendinger

Abigail Fowden

David Good

A. L. Greer

Darshana Joshi

Martha Krish

Patrick Maxwell

Martin Millett

Richard Prager

Susan Rankin

Pippa Rogerson

Helen Thompson

Graham Virgo

Mark Wormald

Reports and Financial Statements

for the year ended 31 July 2017



Reports and financial statements for the year ended 31 July 2017

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Financial review

Preliminary

The commentary that follows is intended to give readers of the financial statements an overview of the finances and operations of the University group, including Cambridge Assessment and Cambridge University Press. It should be read in conjunction with the Annual Report of the Council and the Annual Report of the General Board to the Council for the academical year 2016-17, which are published alongside these financial statements. The financial position of the teaching and research activities of the University may be seen more clearly in the Financial Management Information published in the Reporter. Further detailed information about the finances and operations of Cambridge Assessment and Cambridge University Press is given in the annual reports of those entities which are also published.

Scope of the Financial Statements

The consolidated financial statements cover the teaching and research activities of the University, its subsidiary companies which undertake activities which for legal or commercial reasons are more appropriately carried out by limited companies, Cambridge Assessment and Cambridge University Press and their subsidiary companies and joint ventures, the Gates Cambridge Trust and certain other Trusts (the 'Associated Trusts').

Cambridge Assessment and Cambridge University Press are constituent parts of the corporation known as the Chancellor, Masters, and Scholars of the University of Cambridge. Cambridge Assessment's primary work is the conduct and administration of examinations in schools and for persons who are not members of the University. Cambridge University Press is the publishing house of the University dedicated to publishing for the advancement of learning, knowledge, and research worldwide.

The Associated Trusts are separately constituted charities. They are deemed to be subsidiary undertakings of the University since the University appoints the majority of the trustees of each Trust. The purposes of these trusts are to support the University by enabling persons from outside the United Kingdom to benefit from education in the University by the provision of scholarships and grants and otherwise.

Mission

The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

Its principal activities are teaching and learning, research, stewardship of collections and ancient buildings, and the assessment and publishing activities carried out by Cambridge Assessment and Cambridge University Press.

Funding

The sources of income of the University are:

- Research income from publicly funded Research Councils, charitable foundations, the European Union, and collaborations with the private sector;
- Students through fees charged for instruction and facilities;
- The government, which, through the Higher Education Funding Council for England (HEFCE), provides a grant for research, determined by the quality and volume of research as assessed through the Research Excellence Framework, and a grant towards the cost of teaching;
- Benefactions and donations for endowments, capital, and current use;
- Investment income from endowment and other assets;
- Income from services provided to external customers, including the customers of Cambridge Assessment and Cambridge University Press; and
- Income from commercialisation of intellectual property.

Accounting and presentation of financial statements

Accounting for investment income

The main investment pool generating investment income is the Cambridge University Endowment Fund (CUEF). The CUEF is managed on a total return basis, such that the amount distributed for budgetary expenditure is determined by a formula that has regard to the total return reasonably to be expected in the long term. A substantial proportion of the CUEF's investments yield little or no income in the form of dividends, interest or rents. In the year ended 31 July 2017, distributions by the CUEF exceeded the income received from its underlying investments by £78m (2016: £73m), the balance of the distributions being funded by drawing on long-term capital growth.

In these financial statements total investment income includes the income from the CUEF's underlying investments rather than the distributions made by the CUEF. The impact is that investment income is £78m less than it would have been had it been based on distribution, with a corresponding increase in gains on investments.

Financial results for the year

The results for the University group for the year ended 31 July 2017 are summarized in Table 1.

Table 1	2016–17 £m	2015–16 £m	Change %
Income	1,870	1,799	+3.9%
Expenditure	(1,807)	(1,734)	+4.2%
Surplus before other gains and losses	63	65	
Gains on investments	407	222	
Taxation	(4)	(3)	
Actuarial gain/(loss) and other	26	(182)	
Gain/(loss) on foreign currency translation		10	
Total comprehensive income for the year	492	112	
Total net assets	4,847	4,355	+11.3%

The consolidated position is built up from the University's three main segments: its core academic activities and the assessment and publishing activities carried out by Cambridge Assessment (CA) and Cambridge University Press (CUP) respectively. Within the group there are a number of intra-group transactions, principally the financial and other support from CA and CUP for the University's academic activities. Table 2 gives segmental information, which is considered in further detail in note 17 to the Accounts.

Table 2	Total income 2017 £m	Expenditure 2017 £m	Investment gains 2017 £m	Surplus before tax 2017 £m
HEI, Trusts and others	1,166	(1,159)	371	378
Assessment	413	(365)	33	81
Press	318	(310)	3	11
	1,897	(1,834)	407	470
Financial support to the University from Cambridge Assessment	(24)	24	_	_
Financial support to the University from Cambridge University Press	(3)	3	_	_
As per the reported financial statements	1,870	(1,807)	407	470
Adjustment to reflect the element of Cambridge University Endocapital growth	owment Fu	und distributior	ns funded out o	of long-term
HEI, Trusts and others	70	_	(70)	_
Assessment	7	_	(7)	_
Press	1	-	(1)	
To restate onto a distribution basis	78	_	(78)	_
Adjusted distribution basis	1,948	(1,807)	329	470
	Total income 2016	Expenditure 2016	Investment gains 2016	Surplus before tax 2016
	£m	£m	£m	£m
HEI, Trusts and others	1,148	(1,121)	204	231
Assessment Press	395 275	(358) (274)	17 1	54 2
11033	1,818	(1,753)	222	287
Financial support to the University from Cambridge Assessment	(19)	19	-	-
As per the reported financial statements	1,799	(1,734)	222	287
Adjustment to reflect the element of Cambridge University Endo		und distributior		of long-term
HEI, Trusts and others Assessment	66 7	_	(66) (7)	_
, ascasificit			(/)	
To restate onto a distribution basis			(73)	_
To restate onto a distribution basis Adjusted distribution basis	73	(1,734)	(73) 149	287

Sponsors of research projects continue to be the main source of income for the University at £466m for the year. Research grants and contract activity increased slightly, with a small fall in income as accounted reflecting a reduced contribution to equipment and building capital expenditure mainly from Research Councils. UK based charity funded research income increased by around 12% to £142m with the mix of other categories of sponsors remaining broadly similar.

Tuition and education contract fee income grew by 5% being primarily increases in postgraduate fees. The grants from HEFCE reduced by 8% to £178m reflecting lower capital grants from this source and a further small reduction in the teaching grant as the final steps of the revised funding arrangements for Home/EU undergraduates came through and a reduction in funding council capital grants recognised in the year.

Examination and assessment services are carried out by CA through its three exam boards: Cambridge Assessment English, Cambridge Assessment International Education, and Oxford Cambridge and RSA Examinations (OCR). The two international businesses between them now account for over 80% of CA's income. Total examination and assessment income increased by £20m to £412m, with the gains of the international businesses offsetting a small decline in OCR's revenues.

Publishing service revenue is CUP's income from the sales of educational and scholarly books, e-books, journals, applications and related services. Its three publishing groups are: Academic, which publishes research books, advanced learning materials and reference content as well as journals; Cambridge English Language Teaching, which publishes materials for both adults and students; and Education, which provides teaching materials for schools and advises on educational reform. Overall publishing income from publishing services in the year to 31 July 2017 increased by £42m (+16%) to £311m. Some 90% of Press sales arise outside the United Kingdom and income was also buoyed by the general weakness of sterling. The Education business was particularly strong despite constraints on library budgets and customer business models changing, Academic publishing revenues also increased compared to the previous year.

Donations and endowment income reported under FRS102 recognises all new endowments, donations for capital and in respect of heritage assets, and other restricted and unrestricted donations available for current spend. In aggregate such income totalled £79m (2016: £71m) of which approximately £12m (2016: £13m) was of a capital nature, i.e. donations for fixed assets and heritage assets.

The University receives and generates significant Other income, including from various services provided to external customers, contributions from health and hospital authorities, residences and catering, and income from intellectual property managed primarily through Cambridge Enterprise Limited. Total Other income increased by 7% to £130m.

Investment income provided by the University's financial investments, primarily the CUEF, is an important component of the University's funding mix. As explained above and in Note 11 to the Accounts, the CUEF's distribution, which is available for spending on operations, exceeded the income received in the year from its underlying investments by £78m. On a "distribution basis" investment income was £96m (2016: £94m) with the limited increase reflecting spend down of the funds held for the major capital projects including the North West Cambridge development and CA's Triangle building.

Change in financial position

Table 3 shows the movement in net assets into the group analysed into its three main segments.

Table 3

	HEI, Trusts and others £m	Assessment £m	Press £m	Eliminations £m	Group £m
Net assets at 31 July 2016	3,805	514	52	(16)	4,355
Surplus for the year before tax (Table 2)	378	81	11	_	470
Taxation	_	_	(4)	_	(4)
Actuarial gain/(loss)	(1)	_	27	_	26
Net assets at 31 July 2017	4,182	595	86	(16)	4,847

Capital expenditure programme

The University continues its investment in refreshing, renewing and expanding its academic estate and equipment and in the physical facilities and IT infrastructure for CA and CUP. Continued investment in infrastructure is essential if the University is to remain globally competitive.

Capital expenditure on land and buildings across the Group totalled £284m with a further £45m on equipment and £24m on software projects. Investment of £180m was made in the academic estate across a wide range of building projects, with significant expenditure on the Cambridge Judge Business School building, major laboratory facilities on the Cambridge Biomedical Campus, a new student services centre in central Cambridge, the Chemistry of Health building, and off-site storage facilities for the University Library.

CA continues to make substantial investments in its technical infrastructure and is developing a new office building to accommodate its Cambridge-based staff in a single location and provide space to absorb planned growth. CUP is also maintaining its investment in business systems.

The University is proposing significant capital expenditure in the coming years on academic buildings, with major academic developments planned at the Cambridge Biomedical Campus, the New Museums Site, the Old Addenbrooke's site and at West Cambridge, the last including both the new Cavendish Laboratory and the phased relocation of the Department of Engineering.

North West Cambridge development

The University is developing its site at North West Cambridge to provide University housing for letting to staff, market housing for sale and let, supermarket and retail units, and further sites for research. This will contribute to the strategic need to provide affordable and high quality housing for post-doctoral research staff and others at the beginning of their careers with the University. The development will add to the long-term strategy of the University in allowing further expansion of academic activities. The market housing, which will number 1,500 units, and retail and commercial developments contribute significantly to the viability of the development. The first phase of the

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development comprises some 700 residential units for University and related staff, approximately 325 post-graduate accommodation units, development sites for approximately 450 units for market sale to residential developers, and a local centre with shops, a supermarket and other facilities. This first phase is expected to involve a peak cumulative investment by the University approaching £400m in 2017-18 when the bulk of rental income streams begin. Work is now underway to identify and define the priorities for a second phase of development at North West Cambridge.

Cumulative net capitalised expenditure on the North West Cambridge development was £332m at 31 July 2017 and is included in non-current investments.

Investments

The University's endowment and other investments support posts and activities and give important financial assistance to students. The investment assets are managed in three principal pools:

(i) Cambridge University Endowment Fund (CUEF)

The majority of non-current asset investments are held in the CUEF, which is managed by the University's Investment Office with the advice and oversight of the Investment Board. Colleges and other charities linked with the University are permitted to invest in the CUEF, to gain from its scale, diversification and professional management. The Associated Trusts are substantially entirely invested in the CUEF, and a number of Colleges have made investments.

The CUEF's long-run investment objective is to achieve or exceed an average annual rate of total return (i.e. income and net capital gains) net of all costs and before distributions are taken into account equal to RPI plus 5.25%, such that after the distributions for expenditure are taken into account the capital is maintained in real terms. A further objective is to manage judiciously the risk taken in order to meet the total return objective by utilising diversification of investment strategies, investment asset classes and investment managers.

The amount distributed for expenditure in the operating budget is determined by a formula based on underlying capital values combined with factors which smooth the rate of spending changes from year to year, allowing a degree of certainty for planning purposes.

The CUEF reports its performance to 30 June. During the year ended 30 June 2017 the CUEF had an investment return of 18.8% (2016: 6.3%). The Fund has returned an annualized 13.8% return over a rolling five-year period, which compares favourably to the long term investment objective over this period of 7.7% annualized. The value of the CUEF at 30 June 2017 was £2,959m (2016: £2,656m).

The asset allocation and investment selection in the Fund is aimed at optimizing the expected future long-run total return, bearing in mind expected future volatility. The CUEF's asset allocation at 30 June 2017 was:

Public equity 59%
Private investment 13%
Absolute return 12%
Credit 0%
Real assets 12%
Fixed interest/cash 4%

Over the course of 2016-17 allocations to these broad asset classes did not change significantly. Small reductions in percentage terms were made to public equities and absolute return and the allocations to private investments and fixed interest/cash both increased.

The CUEF's total return of 18.8% in the 12 months to 30 June 2017 was a strong performance. Despite a steady fall in broad market volatility, an increase in the dispersion of individual stock returns in the second half of the year favoured active management, and the CUEF benefitted from the outperformance of its equity and hedge fund managers compared to their benchmarks. There were strong performances in the private investments and direct property assets. Over the year the overall conditions were benign, continued to favour equities over other asset classes, but also caused few investments to be objectively cheap relative to their histories. Aside from a growing list of geopolitical concerns, the principal investment risk is that of bond market weakness, whether arising from the suspension or reversal of Quantitative Easing programmes or a rise in inflation.

(ii) Money market investments

The majority of the University and Group current asset investments are invested in the deposit pool. This pool is managed by the Finance Division according to guidelines on diversification, exposure, and credit quality agreed by the Finance Committee. The investments are principally short-term deposits with banks and similar institutions.

(iii) Other investment assets

Some long-term investments are held outside the CUEF including certain investment properties in Cambridge, other securities, and equity investments in spin-out companies overseen by the University's technology transfer company Cambridge Enterprise Limited.

Long term borrowings

In 2012 the University issued £350m of 3.75% unsecured bonds due October 2052. The bonds are listed on the London Stock Exchange. The net proceeds of the issue of £342m have now largely been applied in the University's investment in the North West Cambridge development.

The University continues to be rated Aaa (stable outlook) by Moody's Investors Service.

Pensions

The costs and risks of the pension schemes to which the University is exposed remain of concern. The Universities Superannuation Scheme (USS) is a major exposure for the University. The USS is a multi-employer scheme and Note 34 to the Accounts describes how the scheme is reflected in these financial statements. The USS trustee is currently preparing the triennial actuarial valuation of the USS as at 31 March 2017. Initial indications are that the deficit will be worse and the cost of future service benefits also materially higher than in the previous valuation, and it is probable that further changes to scheme contributions or benefits, or both, will be necessary.

The University group has three other major schemes: the Cambridge University Assistants' Contributory Pension Scheme (CPS) for assistant staff and two defined benefit schemes for staff of the Cambridge University Press. The CPS is a hybrid defined benefit scheme with a Defined Contribution component and remains open to new joiners and future accrual. The University is making deficit-recovery contributions to the scheme of £14.6m per annum until 2019. The next triennial valuation of the CPS will be as at 31 July 2018. The Cambridge University Press defined benefit schemes are closed to new joiners and, following the triennial valuation of these two schemes as at 1 January 2016, are subject to a recovery plan projecting an aggregate deficit contribution of £25.3m to be funded by 31 July 2022.

Included in the balance sheet as a liability is the present value of future contributions payable to the USS to the extent that they represent recovery payments towards covering the deficit in the USS. The liability recognised with

this treatment was £120m as at 31 July 2017 (2016: £127m). The CPS and the Press schemes, being single-employer schemes, are included in the financial statements following FRS102 and the total net pension liability is £619m (2016: £629m), of which £97m relates to the Press schemes. Pensions are discussed further in Note 34 to the Accounts.

The financial outlook

Major financial risks and uncertainties continue to face the University and the sector: the impact of Brexit, the changes in the Higher Education legislative framework and how these will affect funding for teaching and research.

The single largest source of funding, Research grants and contracts income is projected to continue steady growth, but against the uncertainties of future European research funding following Brexit and the proposed restructuring of UK Research Councils. The failure to cover the full economic cost of research from our sponsors remains a concern. Fee income is expected to increase gently through the long-term upward trend in postgraduate student numbers, although Home/EU undergraduate fees will now be frozen going forward, and therefore, in an increasingly inflationary environment, reduce further in real terms.

CA's international activities are expected to continue to grow over the next five years but the UK market remains challenging. CA's income is expected to grow over the next five years, and there will be continued investment in research, technology, product development, and staff. CUP also anticipates steady revenue growth but faces market, global economic and competitive challenges as customer needs evolve, and continuing global economic challenges. Deepening links, closer working and strategic alignment and greater joint investment between CA and CUP, and opportunities to work more closely with the academic University, are expected to yield gains.

The University is seeing pressure on its pension schemes' costs and risks, in particular the USS, and pay costs more generally given the pay restraint in recent years.

The University faces significant challenges in funding its ambitious but essential strategic capital expenditure programme, with major academic developments planned at the Cambridge Biomedical Campus, the New Museums Site, the Old Addenbrooke's Site and the West Cambridge physical sciences and technology campus, although Cambridge Assessment's major Triangle building is now largely completed. Cash generated from the University's own activities are insufficient on their own to deliver the programme and philanthropic and other sources of capital funding will be increasingly important.

Performance of the University's investment assets has again been strong, with favourable impact on the University's endowment and the assets of its pension schemes. Global economic uncertainties remain and investment returns at the target levels look challenging in the near future.

Principal risks and uncertainties affecting the long-term financial position

The principal financial risks and uncertainties the University must address do not change: its long-term ability to maintain and develop its research funding, attract the best staff and students, and maintain, refresh and renew its physical facilities. The activities of Cambridge Assessment and Cambridge University Press are subject to the pressures of international competition and they must balance the need to generate sufficient net income to ensure that they thrive with the need to support the University's core academic activities whenever possible.

The University's key financial uncertainties and risks are:

· Further cuts to government support for teaching and research. The University will continue to engage with

Government directly and through the wider HE sector, and generally seek to continue to diversify its income sources.

- The continuing deficit between the costs of our education delivered to UK and EU undergraduates and the
 support for it from student fees and government grants. The University has calculated that the average
 annual cost borne by the University and Colleges per Home/EU undergraduate student is around £18,500. The
 Cambridge teaching model is distinctive and successful but is costly to deliver. The University continues to review
 ways of controlling costs, seek value for money gains, and is looking to gradually develop the mix of students to
 permit this quality of education to be maintained.
- The outcome of the restructuring of Research Councils, the funding available to them and the potential consequential impact on the University's research funding. The formation of UK Research and Innovation, which will bring the current Research Councils together, and the increasing emphasis on national research institutes might affect funding. The University will develop strategic relationships with funders, including engaging more closely with Research Councils and other key bodies.
- Research sponsorship from EU sources following the UK's forthcoming exit from the European Union. Loss of European Research Council funding would likely impact on the University's ability to engage leading researchers.
 The University and the HE sector engages with Government on Brexit issues, and the University has established working groups to keep all aspects of Brexit under review.
- The ability to recover the full economic costs of research. Charities and foundations are unwilling to cover the full
 costs and typically contribute only to direct costs. Measures are proposed to improve cost recovery on grants,
 and to increase research funding from industry which would be expected to bring improved recovery of indirect
 costs.
- Movements in investment markets impacting the value of the endowment and other investment assets. The
 CUEF is managed across a diversified range of asset classes, sectors, styles and geographies with a broad equity
 focus, and is designed to be resilient over the long term. Short term volatility, particularly at the high assets
 values currently observed, should however be expected.
- The costs and risks of pension provision, in particular from participation in the Universities Superannuation
 Scheme. The USS's triennial valuation currently being reviewed indicates an increased deficit and potentially
 materially increased cost of provision of future defined benefits. The HE sector is currently proposing changes to
 the USS benefits with the aim of controlling cost and risks in respect of future service benefits.
- Pay inflation, against a background of pay restraint in recent years. General pay increases have been at levels
 below inflation, and recruitment and retention of all categories of staff, particularly in the context of Cambridge
 housing costs, is under pressure. The University is investing in its North West Cambridge residential development
 to ease certain pressures, and in economy, efficiency and effectiveness in its operations to accommodate pay
 inflation as necessary.
- The ability to continue to invest in buildings, infrastructure and equipment for both teaching and research, against a background of limited government capital funding. The University has an ambitious building programme, and is actively managing its strategic investment, and the operating cash flows and capital grants from government and philanthropic sources.
- The support by benefactors for endowment, capital expenditure and for current use. The University is investing further in its Development and Alumni Relations activities. A new campaign with a target to raise £2 billion across collegiate Cambridge was launched in October 2015.

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- The economic success of Cambridge Assessment and Cambridge University Press, which operate in challenging
 international markets. CA in particular provides a valuable source of unrestricted funding which the University
 designates for its academic capital programme. A joint board provides oversight of these two businesses and is
 developing an overarching strategy to ensure they continue to thrive.
- The further impact of the UK's forthcoming exit from the European Union on these risks and uncertainties. The
 University has established working groups to keep all aspects of Brexit under review and develop strategies to
 ensure that the University maintains and enhances its position as the external environment changes.

Concluding remarks

The University group's financial operating performance over 2016-17 was satisfactory with a surplus before other gains and losses of £63m, on total income of £1.9 billion. With the exception of funding body grants and Research income each category of income grew. The University is active in diversifying its funding sources to avoid dependence on any single stream. The relatively small overall surplus was after all donations, including for permanent endowment and capital purposes, and significant surplus from CA's trading activities. After bringing in the full distribution from the CUEF available for spend and adjusting for non-cash charges such as depreciation and amortization the underlying cash flow is more substantial, but against this must be set the demands of capital expenditure on the operational estate, equipment and IT, which in 2016-17 totalled £354m. The financial position remains finely balanced with pressures on costs, and the need to generate support for the strategic capital programme.

The University is one of the world's leading academic institutions and has a reputation for outstanding academic achievement. This reputation has been built up over a long time and is an important factor in attracting the best academic staff and students. Maintaining the financial ability to continue to attract and retain the best staff and to provide research and teaching facilities commensurate with our standing as one of the world's leading universities remains an ongoing challenge.

Professor Duncan Maskell Senior Pro-Vice-Chancellor

Corporate governance

- 1. The following statement is provided by the Council to enable readers of the financial statements to obtain a better understanding of the arrangements in the University for the management of its resources and for audit.
- 2. The University endeavours to conduct its business in accordance with the seven principles identified by the Committee on Standards in Public Life (selflessness, integrity, objectivity, accountability, openness, honesty, and leadership) and within the general principles of the Higher Education Code of Governance, which has been provided by the Committee of University Chairs. Further information is given at paragraph 9 below.
 - Under the Statutes, the Governing Body of the University is the Regent House, which comprises the resident senior members of the University and the Colleges, together with the Chancellor, the High Steward, the Deputy High Steward, the Commissary, and the external members of the Council. The approval of the Regent House is required for changes to the University's Statutes and Ordinances and for any other matter for which in Statute or Ordinance the University's approval must be obtained; the Council and the General Board may also decide to seek the Regent House's approval on questions of policy which are considered likely to be controversial. The Council of the University is the principal executive and policy-making body of the University, with general responsibility for the administration of the University, for the planning of its work, and for the management of its resources. The membership of the Council includes four external members, one of whom chairs the Audit Committee (see paragraph 7 below). The Statutes provide for the appointment of a Deputy Chair of the Council, normally one of the external members, to take the chair as necessary or when it would be inappropriate for the Vice-Chancellor to do so, in particular in relation to the Vice-Chancellor's own accountability. The General Board of the Faculties is responsible for the academic and educational policy of the University.
- 3. The University is an exempt charity and is subject to regulation by the Higher Education Funding Council for England (HEFCE). The members of the University Council are the charity trustees and are responsible for ensuring compliance with charity law.
- 4. The Council is advised in carrying out its duties by a number of committees, including the Finance Committee, the Audit Committee, the Planning and Resources Committee, the Remuneration Committee, the Investment Board, and the Risk Steering Committee. The Finance Committee is chaired by the Vice-Chancellor and advises the Council on the management of the University's assets, including real property, monies, and securities, and on the care and maintenance of all University sites and buildings. The Audit Committee, which has a majority of external members, governs the work of the Internal and External Auditors, reporting on these matters directly to the Council. The Planning and Resources Committee is a joint committee of the Council and the General Board. Its responsibilities include the development and oversight of the University's strategic plan, and the preparation of the University's budget. The Remuneration Committee is chaired by an external member of the Council and advises the Council on the remuneration of senior staff in the University. The Investment Board, which has a majority of external members, advises the Council on the management of the University's investment assets. The Risk Steering Committee is responsible to the Council for the identification of the major corporate risks and their management. The West and North West Cambridge Estates Board reports to the Council on its oversight of the development of two key University sites. The Press and Assessment Board advises the Council on matters concerning Cambridge University Press and Cambridge Assessment.
- 5. Under the terms of the Financial Memorandum between the University and HEFCE, the Vice-Chancellor is the Accountable Officer of the University.
- 6. Under the Statutes, it is the duty of the Council to exercise general supervision over the finances of all institutions in the University; to keep under review the University's financial position and to make a report thereon to the University at least once in each year; to recommend bankers for appointment by the Regent House; and

- to prepare and publish the annual accounts of the University in accordance with UK-applicable accounting standards such that the accounts give a true and fair view of the state of affairs of the University.
- 7. It is the duty of the Audit Committee to keep under review the effectiveness of the University's internal systems of financial and other controls; to advise the Council on the appointment of external and internal auditors; to consider reports submitted by the auditors, both external and internal; to monitor the implementation of recommendations made by the internal auditors; to satisfy themselves that satisfactory arrangements are adopted throughout the University for promoting economy, efficiency, and effectiveness; to establish appropriate performance measures and to monitor the effectiveness of external and internal audit; to make an annual report to the Council, the Vice-Chancellor, and to HEFCE; to receive reports from the National Audit Office and from HEFCE. Membership of the Audit Committee includes as a majority five external members (including the chair of the Committee), appointed by the Council with regard to their professional expertise and experience in comparable roles in corporate life.
- 8. There are Registers of Interests of Members of the Council, the General Board, the Finance Committee, and the Audit Committee, and of the senior administrative officers. Declarations of interest are made systematically at meetings.
- 9. The University is a self-governing community whose members act in accordance with the seven principles of public life (see paragraph 2 above) and in pursuit of the objectives and purposes of the University as set out in its Statutes. The University complies with most but not all of the voluntary Higher Education Code of Governance published in December 2014 by the Committee of University Chairs. In particular the Vice-Chancellor is chair of the Council, which does not have a majority of external members, and the Council is subject to the statutory authority of the Regent House. The University has no immediate plans to change these arrangements, which have proved reliable over many years in enabling the University to achieve its academic objectives.

Members of the Council and the charity trustees during the year ended 31 July 2017

The Chancellor Lord Sainsbury of Turville

The Vice-Chancellor Professor Sir Leszek Borysiewicz

Heads of Colleges Dr Anthony Freeling (from 19 July 2017)

Mr Stuart Laing

Professor Michael Proctor Professor Susan Smith

Professor Ian White (until 18 July 2017)

Professors or Readers Professor Ross Anderson

Professor Anne Davis (until 31 December 2016) Professor Nick Gay (from 1 January 2017)

Professor Fiona Karet Dr Susan Oosthuizen

Members of the Regent House Dr Richard Anthony

The Reverend Jeremy Caddick (until 31 December 2016)

Dr Ruth Charles

Dr Stephen Cowley (from 1 January 2017)

Dr Margaret Glendenning (until 31 December 2016)

Dr David Good (until 31 December 2016)

Dr Nicholas Holmes Dr Alice Hutchings

Dr Rachael Padman (until 31 December 2016) Dr Pippa Rogerson (from 1 January 2017) Dr Mark Wormald (from 1 January 2017) Ms Jocelyn Wyburd (from 1 January 2017)

Student members Mr Chad Allen (until 30 June 2017)

Mr Amatey Doku (until 30 June 2017) Ms Daisy Eyre (from 1 July 2017) Ms Darshana Joshi (from 1 July 2017)

Ms Umang Khandelwal

External members Mr Mark Lewisohn

Professor Dame Shirley Pearce (until 31 December 2016)

Mr John Shakeshaft (Deputy Chair)

Ms Sara Weller

The Chancellor, external members, student members, Mr Laing, Professor Smith, Dr Freeling, Mr Caddick and Dr Anthony are not employees of the University. The other members of the Council are employees of the University. No member of the Council receives payment for serving as a member of the Council

Statement of Public Benefit

The University is an exempt charity subject to regulation by the HEFCE under the Charities Act 2011. The University reports annually on the ways in which it has delivered charitable purposes for the public benefit.

The Council, in reviewing the University's activities in this regard, has taken into account the Charity Commission's guidance on public benefit. The Council is satisfied that the activities of the University as described in these Reports and Financial Statements, and in the Annual Report of the Council, fully meet the public benefit requirements.

The Mission of the University

The Mission of the University is 'to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence. The University makes a significant contribution, through these activities, directly and most obviously to the advancement of education, research and dissemination of knowledge.

Research

The University is widely recognised as one of the leading research universities in the world both in terms of quality and in terms of scope and breadth. Research is undertaken at the highest level across a wide range of areas. The University takes seriously its obligations to disseminate and make publicly accessible the outcomes of its academic research activities through publication, teaching, conferences, consultancy and other knowledge transfer and outreach activities. It therefore offers public benefit through the continued advancement of knowledge across the sciences, medicine, arts, humanities, culture and heritage.

A substantial proportion of the research undertaken in the University across the fields of clinical medicine, biomedicine, physics of medicine and engineering leads directly to the advancement of health and the saving of lives. Research is also carried out in the area of sustainability, environmental protection and improvement.

Research work in the University is focussed at local, national and international levels. The products of this research have a wide-ranging influence through the advancement of understanding and its application in scientific and technological advances, and through informing public debate on policy. The impact of the University's research extends to governments, public sector bodies and charities.

Education

The University's research activities feed directly into its teaching at every level. Around 20,000 students, of whom 12,000 are full-time undergraduates, pursue courses across a wide range of disciplines. The quality of the education (and, as importantly, the educational experience) which the University provides is consistently recognised by the University's status at or near the top of national and international rankings.

The University is committed to admitting students of the highest intellectual potential, irrespective of social, racial, religious, financial or other considerations. The University ensures that individuals from all backgrounds can benefit from the opportunities afforded by a first-rate education and are not unreasonably excluded from those opportunities by the charging of fees. The University ensures that bursaries are available where necessary and outreach activities are undertaken to improve participation by under-represented groups. Financial support is provided to students from overseas through University funds and by trusts associated with the University. Further information is available at https://www.cambridgestudents.cam.ac.uk/cambridgebursary and http://www.graduate.study.cam.ac.uk/finance/funding.

The University is aware that there are significant variations in the educational opportunities, information and support available to individuals. It therefore invests significant resource and effort into its access and widening participation activities. The University encourages applications from people with disabilities and from mature students.

For the wider community a broad range of lectures, seminars, and courses provide the opportunity for members of the wider public to share in the University's educational provision. The University's Institute of Continuing Education offers short non-credit courses, residential and summer schools.

The University is committed to equipping those who participate in its educational programmes with the highest quality of teaching and pastoral, infrastructural, and academic support. It is fundamental to the University's mission that its students are personally, academically and professionally equipped to contribute positively to society. In this regard, the quality and depth of their student experience benefits them directly but also benefits the societies to which they will contribute, through their participation in the workforce and as informed and questioning citizens.

The wider applications of the University's commitment to disseminating knowledge

The University's publishing house, the Cambridge University Press contributes to the University's commitment to make publicly accessible the outcomes of academic research activities in Cambridge and from across the world by publishing peer-reviewed academic material and other educational publications. Through Cambridge Assessment, the University develops and delivers a range of widely used and respected examinations, benefiting the UK and world-wide community by offering internationally recognised qualifications, raising aspirations and transforming lives.

Statement of internal control

- The Council is responsible for maintaining a sound system of internal control that supports the achievement of
 policies, aims, and objectives, while safeguarding the public and other funds and assets for which the Council
 is responsible, in accordance with the Statutes and Ordinances and the HEFCE Memorandum of Assurance and
 Accountability.
- 2. The system of internal control is designed to manage rather than eliminate the risk of failure to achieve policies, aims, and objectives; it therefore provides reasonable but not absolute assurance of effectiveness.
- 3. The system of internal control is designed to identify the principal risks to the achievement of policies, aims, and objectives, to evaluate the nature and extent of those risks and to manage them efficiently, effectively, and economically. This process was in place for the year ended 31 July 2017 and up to the date of approval of the financial statements, and accords with HEFCE guidance.
- 4. The Council is responsible for reviewing the effectiveness of the system of internal control. The following processes have been established:
 - (a) The Council meets eleven times throughout the year to consider the plans and strategic direction of the University.
 - (b) The Council receives periodic reports from the Chair of the Audit Committee concerning internal control and the minutes of all meetings of the Audit Committee.
 - (c) The Council's Risk Steering Committee oversees risk management. The Council receives periodic reports from the Chairman of the Risk Steering Committee and the minutes of all meetings of the Risk Steering Committee.
 - (d) The Audit Committee receives regular reports from the internal auditors, which include the internal auditors' independent opinion on the adequacy and effectiveness of the University's system of internal control and risk management, together with recommendations for improvement. Risk management is a standing item on the Audit Committee agenda.
 - (e) The University provides information (primarily through web-based resources) to those who own or manage central or School risks.
 - (f) A system of indicators has been developed for the University's key risks.
 - (g) A robust risk prioritization methodology based on risk ranking and cost-benefit analysis has been established.

The Council's review of the effectiveness of the system of internal control is informed by the work of the internal auditors, Deloitte LLP.

5. The Council's review of the effectiveness of the system of internal control is also informed by the work of the senior officers and the risk owners within the University, who have responsibility for the development and maintenance of the internal control framework, and by comments made by the external auditors in their management letter and other reports.

Statement of the responsibilities of the Council

Under the University's Statutes and Ordinances it is the duty of the Council to prepare and to publish the annual accounts of the University in accordance with UK applicable accounting standards such that the accounts give a true and fair view of the state of affairs of the University.

The Council is responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the University.

In preparing the financial statements the Council is required to:

- select suitable accounting policies and then apply them consistently;
- (b) make judgements and estimates that are reasonable and prudent;
- (c) state whether applicable accounting standards have been followed;
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the University will continue to operate;
- ensure that income has been applied in accordance with the University's Statutes and Ordinances, and its Memorandum of Assurance and Accountability with the HEFCE, and the funding agreement with the National College for Teaching and Leadership; and
- safeguard the assets of the University and take reasonable steps to prevent and detect fraud and other irregularities.

Independent auditors' report to the Council of the University of Cambridge (the "University")

Our opinion

In our opinion the University of Cambridge's group financial statements and University financial statements (the "financial statements"):

- 1. 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 the group's cash flows for the year then ended;
- have been properly prepared in accordance with the 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); and
- have been properly prepared in accordance with the Statement of Recommended Practice
 Accounting for Further and Higher Education, and the requirements of the 2016/17 HEFCE Accounts Direction.

We have audited the financial statements, included within the Reports and Financial Statements, which comprise: the consolidated and University's Balance Sheets as at 31 July 2017; the consolidated and University's Statements of Comprehensive Income, the consolidated Statement of Cash Flows, and the consolidated and University's Statement of changes in Reserves for the year then ended; and the notes to the financial statements, which include a summary of significant accounting policies and other explanatory information.

Our opinion is consistent with our reporting to the Audit Committee.

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.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the group or the University.

Other than those disclosed in note 14 to the financial statements, we have provided no non-audit services to the group or the University in the period from 1 August 2016 to 31 July 2017.

Our audit approach

Overview

Overall group materiality: £18 million which represents 1% of total income

The scope of our work covered the Academic University, Cambridge Assessment, Cambridge University Press and the Cambridge University Endowment Fund Our audit scope addressed 97% of Group income and 93% of the Group's assets

Pension schemes and post-retirement benefits Valuation of investments Costs relating to significant capital projects Accounting for donations



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. We also addressed the risk of fraud in revenue recognition.

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.

Key audit matter

Pension schemes and post-retirement benefits

Refer to note 34 (Pension schemes) and note 28 (Pension liabilities)

The Group has defined benefit pension plans with net liabilities of £619.0 million, which is significant in the context of the Group balance sheet. The Group also holds a liability in respect of the deficit reduction agreement for the USS of £120.1m.

The valuation of the pension liabilities require significant levels of judgement and technical expertise in choosing appropriate assumptions. 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.

How our audit addressed the key audit matter

We obtained the pension valuation report from the external actuary. With the assistance of our internal actuarial specialists we compared the inflation rates and discount rates used in the valuation of the pension liability by the external actuary to our internally developed benchmarks. We compared the assumptions around salary increases and mortality to national and industry averages.

We performed testing over the census data on which the valuation is based.

We agreed underlying assets in the scheme to confirmations obtained from fund managers, and obtained controls reports and / or financial statements to evaluate the reliability of the evidence obtained.

Based on this work, no material issues were noted.

Valuation of investments held in the Cambridge University Endowment Fund (CUEF)

Refer to note 21 (Non-current investments) and note 11 (Investment income).

£2,689.6 million of the group's investments are held within the CUEF. Therefore the valuation of the units, used by the various components of the group in determining their investment valuations, is key. The remaining £294.8m of units in the CUEF are held by third parties.

For the majority of assets (92.5%), valuation is not significantly judgemental, and is based on market data.

The remaining balance consists of £177m of assets which are valued by an independent third party, and £22m which are valued internally.

For investments in quoted securities, pooled investment funds and derivatives, totalling 92.5% of the fund, we agreed a sample of the valuations to independent sources, and for a further sample, agreed the valuations included confirmations from fund managers. Where we obtained confirmations from fund managers, we obtained controls reports and / or financial statements to evaluate the reliability of the evidence obtained.

In addition, we obtained confirmation over 92.5% of the total balance from the custodian.

In the case of a sample of property related assets valued by third parties (5.9% of the total), with the assistance of our internal valuation specialists, we performed procedures to assess the valuation approach used and the reliability of the information provided.

In the case of property related assets valued internally by the investment committee (0.7%), with the assistance of our internal valuation specialists, we considered the reasonableness of the approach to the valuation and of the key inputs.

No exceptions were identified during our testing.

Key audit matter

How our audit addressed the key audit matter

Costs relating to significant building projects Refer to note 19 (Fixed assets), note 21 (Non-

current investments) and note 18 (Intangible assets)

projects in progress, agreeing a sample of additions to third party evidence.

We assessed the appropriateness of capitalising such

costs as well as testing the significant additions to

During the year the Group capitalised £329.3m in relation to building projects.

No exceptions were noted during our testing.

Accounting for donations

Refer to note 9 (Donations and endowments)

During the year the Group recognised income of £79.1m from donations and endowments. The accounting treatment for donations varies depending on the conditions attached by the donor at the time of the gift. There is a risk that donations to the University are misclassified

For a sample of donations recorded, we inspected the terms of the donation and confirmed that the accounting for such donations was in accordance with the Statement of Recommended Practice – Accounting for Further and Higher Education.

We considered whether any of the donations made in the year are in the form of multi-year grants, and in discussion with management assessed whether the amounts should be recognised upfront or over the term of the grant.

Our testing involved assessing the processes and controls involved in the recording of donations. We also agreed whether a sample of donations had been correctly classified by agreeing donations to supporting documentation, such as letters from the donor setting out any restrictions on the gift. No exceptions were noted as part of our testing.

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 industry in which they operate.

Audit Approach overview

The scope of our audit included the Academic University, Cambridge Assessment, the Cambridge University Press and the Cambridge University Endowment Fund. Together the results of these components account for all material balances and line items within the consolidated financial statements.

In establishing the overall approach to the group and University audit, we determined the type of work that needed to be performed at the reporting units by us, as the group engagement team, or component auditors within PwC UK. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those reporting units to be able to conclude whether sufficient and appropriate audit evidence had been obtained as a bases for our opinion on the group financial statements as a whole. Our involvement in the work of the component auditors included regular communication with a formal meeting arranged following the performance of the procedures. In addition, a member of the Group engagement team conducted a review of the working papers.

Our scoping of the University was consistent with our group scoping.

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:

	Group and University financial statements
Overall materiality	£18 million (2016: £18 million).
How we determined it	1% of income.
Rationale for benchmark applied	As the University is a not-for-profit organisation, the most suitable benchmark to use for overall group materiality is total income.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was between £6 million and £14.5 million.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £0.6 million (2016: £0.6 million) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Going concern

In accordance with ISAs (UK) we report as follows:

Reporting obligation

We are required to report if we have anything material to add or draw attention to in respect of the Council statement in the financial statements about whether the Council considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the Council's identification of any material uncertainties to the group's and the University's ability to continue as a going concern over a period of at least twelve months from the date of approval of the financial statements.

Outcome

We have nothing material to add or to draw attention to. 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 Reports and Financial Statements 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.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Responsibilities for the financial statements and the audit

Responsibilities of the Council for the financial statements

As explained more fully in the Statement of Responsibilities of the Council, 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 they determine 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

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 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 HEFCE Audit Code of Practice issued under the Further and Higher Education Act 1992

In our opinion, in all material respects:

- funds from whatever source administered by the institution for specific purposes have been properly applied to those purposes and, if relevant, managed in accordance with relevant legislation;
- · income has been applied in accordance with the Statutes and Ordinances of the University; and
- funds provided by HEFCE have been applied in accordance with the Memorandum of Assurance and Accountability, and any other terms and conditions attached to them.

Other matters on which we are required to report by exception

Under the HEFCE 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 is inconsistent with our knowledge of the University and group. We have no exceptions to report from this responsibility.

Appointment

Following the recommendation of the audit committee, we were appointed by the members on 1 December 2008 to audit the financial statements for the year ended 31 July 2009 and subsequent financial periods. The period of total uninterrupted engagement is 9 years, covering the years ended 31 July 2009 to 31 July 2017.

PricewaterhouseCoopers LLP Chartered Accountants and Statutory Auditors Cambridge 20 November 2017

Statements of comprehensive income for the year ended 31 July 2017

	Note	Group Year ended 31 July 2017	Group Year ended 31 July 2016	University Year ended 31 July 2017	University Year ended 31 July 2016
		£m	£m	£m	£m
Income	_	276	262	264	250
Tuition fees and education contracts Funding body grants	5 6	276 178	263 193	264 178	250 193
Research grants and contracts	7	466	469	458	462
Examination and assessment services	8	412	392	335	312
Publishing services	Ü	311	269	277	242
Donations and endowments	9	79	71	81	67
Other income	10	130	121	106	99
Investment income	11	18	21	15	18
Total income	12	1,870	1,799	1,714	1,643
Expenditure	12		1,7,55		1,013
Staff costs	13	799	762	738	708
Other operating expenses	14	887	862	786	751
Depreciation	14, 19	90	77	87	76
Interest and other finance costs	14, 15	31	33	31	33
Total expenditure		1,807	1,734	1,642	1,568
Surplus before other gains and losses		63	65	72	75
Gain on investments	21	407	222	326	180
Surplus before tax		470	287	398	255
Taxation	16	(4)	(3)	(1)	(2)
Surplus for the year	32	466	284	397	253
Other comprehensive income					
Actuarial gain / (loss)	28, 29	26	(182)	26	(182)
Gain arising on foreign currency translation		-	10	_	11
Total comprehensive income for the year	32	492	112	423	82
Represented by:					
Endowment comprehensive income for the year	30	209	105	180	93
Restricted comprehensive income for the year	31	50	66	49	66
Unrestricted comprehensive income/(expense) for the year		233	(59)	194	(77)
	32	492	112	423	82

Statements of changes in reserves for the year ended 31 July 2017

			Unrestricted	Total
	£m	£m	£m	£m
Group Balance at 1 August 2015	1,414	81	2,748	4,243
Surplus for the year ended 31 July 2016	105	66	113	284
Other comprehensive income	_	_	(172)	(172)
Total comprehensive income for the year ended 31 July 2016	105	66	(59)	112
Release of restricted capital funds spent in the year ended 31 July 2016	-	(68)	68	-
Balance at 31 July 2016	1,519	79	2,757	4,355
Surplus for the year ended 31 July 2017	209	50	207	466
Other comprehensive income	_	-	26	26
Total comprehensive income for the year ended 31 July 2017	209	50	233	492
Release of restricted capital funds spent in the year ended 31 July 2017	-	(43)	43	-
Balance at 31 July 2017	1,728	86	3,033	4,847
Materials.				
University Balance at 1 August 2015	1,176	81	2,536	3,793
-				
Surplus for the year ended 31 July 2016 Other comprehensive income	93	66	95 (172)	254 (172)
·				
Total comprehensive income for the year ended 31 July 2016	93	66	(77)	82
Release of restricted capital funds spent in the year ended 31 July 2016	-	(68)	68	_
Balance at 31 July 2016	1,269	79	2,527	3,875
Surplus for the year ended 31 July 2017	180	49	168	397
Other comprehensive income	_	_	26	26
Total comprehensive income for the year ended 31 July 2017	180	49	194	423
Release of restricted capital funds spent in the year ended 31 July 2017	-	(43)	43	-

Balance sheets as at 31 July 2017

		Group	Group	University	University
		31 July 2017	31 July 2016	31 July 2017	31 July 2016
	Note	£m	£m	£m	£m
Non-current assets					
Intangible assets and goodwill	18	77	75	74	74
Fixed assets	19	2,488	2,249	2,484	2,243
Heritage assets	20	67	65	67	65
Investments	21	3,173	2,904	2,646	2,440
		5,805	5,293	5,271	4,822
Current assets					
Stocks and work in progress	22	49	53	44	46
Trade and other receivables	23	380	368	369	369
Investments	24	345	242	873	694
Cash and cash equivalents	25	281	328	246	292
		1,055	991	1,532	1,401
Creditors: amounts falling due within one year	26	(896)	(792)	(1,404)	(1,228)
Net current assets		159	199	128	173
Total assets less current liabilities	•	5,964	5,492	5,399	4,995
Creditors: amounts falling due after more than one year	27	(356)	(359)	(345)	(347)
Pension liabilities	28	(739)	(756)	(734)	(751)
Other retirement benefits liabilities	29	(22)	(22)	(22)	(22)
Total net assets		4,847	4,355	4,298	3,875
Restricted reserves					
Income and expenditure reserve - endowment	30	1,728	1,519	1,449	1,269
Income and expenditure reserve - restricted	31	86	79	85	79
Unrestricted reserves					
Income and expenditure reserve - unrestricted		3,033	2,757	2,764	2,527
Total reserves		4,847	4,355	4,298	3,875

The financial statements on pages 59 to 111 were approved by the Council on 20 November 2017 and signed on its behalf by:

Professor Stephen Toope Vice-Chancellor

John Shakeshaft Member of Council **Andrew Reid** Director of Finance

Consolidated statement of cash flows for the year ended 31 July 2017

		Group	Group
		Year ended	Year ended
		31 July 2017	31 July 2016
	Note	£m	£m
Cash flow from operating activities			
Surplus for the year		466	284
Adjustments for non-cash items:			
Depreciation	14, 19	90	77
Amortisation of intangible assets	18	23	23
Gain on investments	21	(407)	(222)
Decrease in stocks and work in progress	22	4	2
Increase in trade and other receivables		(12)	(7)
Increase in creditors		19	8
Revision of deficit recovery cost recognised in the year	13, 28	(2)	18
Other pension costs less contributions payable	28	9	7
Other retirement benefit costs less contributions payable	29	_	_
Receipt of donated assets	20	(1)	(3)
Currency adjustments		2	11
Adjustments for investing or financing activities:			
Investment income	11	(18)	(21)
Interest payable	11	13	14
New endowments	9	(30)	(30)
Capital grants and donations	9	(78)	(109)
Share of joint venture and associated net surplus		(1)	(109)
Gain on the sale of fixed assets		(1)	_
Net cash inflow from operating activities		77	52
Cash flows from investing activities			
Capital grants and donations		78	109
Proceeds from sales of fixed assets		2	2
Proceeds of sales: North West Cambridge		-	20
Proceeds from sales of other non-current asset investments	21	318	201
Net disposals of other current asset investments		_	28
Investment income	11	18	21
Payments made to acquire intangible assets	18	(25)	(26)
Payments made to acquire fixed assets		(314)	(244)
Payments made to acquire heritage assets	20	(2)	(2)
Payments made to acquire other non-current asset investments	21	(69)	(74)
Acquisition of non-controlling interest	32	(1)	-
Payments made re North West Cambridge development costs		(110)	(137)
Net cash outflow from investing activities		(105)	(102)
Cash flows from financing activities			
New endowments	9	30	30
Interest paid		(13)	(14)
Capital element of finance lease repayments	26, 27	(1)	(1)
Repayments of loans	26, 27	(1)	(1)
	20,2		
Net cash inflow from financing activities		15	14
Reduction in cash and cash equivalents in the year		(13)	(36)
Cash and cash equivalents at beginning of the year		294	330
Cash and cash equivalents at end of the year		281	294
Represented by:			
Cash and cash equivalent assets	25	281	328
Bank overdrafts	26		(34)
		281	294
University of Cambridge Annual Penert 2017			

Notes to the accounts for the year ended 31 July 2017

1. General information

The Chancellor, Masters, and Scholars of the University of Cambridge (the University) is a common law corporation, governed by its Statutes and Ordinances together with applicable United Kingdom and European Union legislation. The University is a public benefit entity and an exempt charity subject to regulation by the Higher Education Funding Council for England (HEFCE) under the Charities Act 2011.

The contact address is: University of Cambridge, The Old Schools, Trinity Lane, Cambridge CB2 1TN, UK.

The principal activities of the University and its subsidiary undertakings are teaching, research, and related activities which include: publishing services; examination and assessment services; the operation of museums, libraries, and collections; and the commercialisation of intellectual property generated within the University.

2. Statement of compliance

The financial statements have been prepared in accordance with Financial Reporting Standard 102, The Financial Reporting Standard applicable in the United Kingdom and the Republic of Ireland (FRS 102), including the public benefit entity requirements of FRS 102, and the Statement of Recommended Practice: Accounting for Further and Higher Education 2015 (the SORP).

The statement of comprehensive income includes captions additional to those specified by the SORP in order to present an appropriate overview for the specific circumstances of the University.

3. Statement of significant accounting policies

a. Basis of preparation

The financial statements have been prepared under the historical cost convention, as modified by the recognition of certain financial assets and liabilities measured at fair value.

The University has taken advantage of exemptions in FRS 102:

- from preparing a statement of cash flows for the University, on the basis that it is a qualifying entity and the consolidated statement of cash flows, included in these financial statements, includes the University's cash flows; and
- from the financial instrument disclosures required under FRS 102 paragraphs 11.39 to 11.48A and paragraphs 12.26 to 12.29, in relation to the University, as the information is provided in the consolidated financial statement disclosures.

The preparation of financial statements requires judgement in the process of applying the accounting policies and the use of accounting estimates. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are discussed at the end of these policies.

b. Going concern

The Council has a reasonable expectation that the University has adequate resources to continue to operate for the foreseeable future. In forming this view the Council notes that the University:

- undertakes a robust and detailed annual business planning and budgeting process, including preparation of
 a five year financial sustainability review in line with HEFCE guidance and as such the going concern nature of
 the University has been considered for a period of greater than twelve months from the date of approval of the
 financial statements;
- applies prudent financial and cash management in order to ensure that its day to day working capital needs can be met out of cash and liquid investments; and
- has considered the potential impact of credit risk and liquidity risk detailed in note 39.

For these reasons, the University continues to adopt the going concern basis in preparing its financial statements.

c. Basis of consolidation

The consolidated financial statements include the University and its subsidiary undertakings, details of which are given in note 35. Intra-group transactions and balances are eliminated on consolidation.

The results of subsidiaries acquired or disposed of in the current or prior years are consolidated for the periods from or to the date on which control passed. The acquisition method of accounting has been adopted for subsidiary undertakings. Amounts attributable to non-controlling interests represents the share of profits on ordinary activities attributable to the interest of equity shareholders in subsidiaries which are not wholly owned by the University.

The University accounts for its share of joint ventures using the equity method. A joint venture is an entity in which the University, or its subsidiaries, holds an interest on a long-term basis and is jointly controlled by the University or its subsidiaries and one or more other entities under a contractual agreement.

The University accounts for jointly controlled assets and operations based upon its share of costs incurred and recognises its share of liabilities incurred. Income and expenditure is recognised based upon the University's share.

Investments in subsidiaries and joint ventures are accounted for at the lower of cost or net realisable value.

The consolidated financial statements do not include the accounts of the 31 Colleges in the University ('the Colleges'), each of which is an independent corporation. Transactions with the Colleges are disclosed in note 37.

The consolidated financial statements do not include the accounts of Cambridge University Students' Union or of the Cambridge University Graduate Union, as these are separate bodies in which the University has no financial interest and over whose policy decisions it has no control.

d. Foreign currencies

The University financial statements are presented in pounds sterling and rounded to millions.

Transactions denominated in foreign currencies are recorded at the rate of exchange ruling at the date of the transactions. Where foreign branches and subsidiary undertakings accounting in foreign currencies operate as separate businesses, all their assets and liabilities are translated into sterling at year-end rates and the net effect of currency adjustments is included in other comprehensive income. Otherwise, monetary assets and liabilities denominated in foreign currencies are translated into sterling at year-end rates and translation differences are included in income or expenditure.

e. Recognition of income

Revenue

Income arising from the sale of goods or the provision of services is recognised in income on the exchange of the relevant goods or services and where applicable is shown net of value added taxes. In particular:

Tuition fees and education contracts

Tuition fees for degree courses are charged to students by academic term. Income is recognised for academic terms falling within the period. For short courses, income is recognised to the extent that the course duration falls within the period. Professional course fees and other educational contract revenues are recognised in line with the stage of completion/degree of provision of the service, as determined on an appropriate basis for each contract.

Examination and assessment services

Income from examination session-based assessments is recognised when services are rendered and substantially complete. Income from qualifications not based on examination sessions is recognised in proportion to the number of modules required for the qualification that have been achieved by candidates.

Publishing services

In the case of books and other print publications, income is recognised on delivery of the goods to the customer. Income generated from electronic publishing, including the provision of perpetual access, is recognised when the material is initially made available. Subscriptions income is recognised evenly over subscription periods. Journals income is recognised when the journals are published and shipped. Rights and permissions income is recognised on a cash receipt basis. Income in respect of certain co-publishing arrangements is recognised upon the printing of content by the co-publishing partner.

Grant income

All grant funding, including HEFCE grants, research grants and capital grants, from government and other sources, is recognised in income when the University is entitled to the funding and any performance-related conditions have been met. 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. Research and development expenditure credits receivable from HM Revenue & Customs are recognised as income when the relevant expenditure has been incurred and there is reasonable assurance of receipt.

Donations and endowments

Donations and endowments are recognised in income when the University is entitled to the funds.

Donations are credited to endowment reserves, restricted reserves or unrestricted reserves depending on the nature and extent of restrictions specified by the donor:

Donations with no substantial restrictions are included in unrestricted reserves.

Donations which are to be retained for the future benefit of the University are included in endowment reserves. Endowment funds are classified under three headings:

- Where the donor has specified that the fund is to be permanently invested to generate an income stream for the general purposes of the University, the fund is classified as an unrestricted permanent endowment.
- Where the donor has specified that the fund is to be permanently invested to generate an income stream to be applied for a restricted purpose, the fund is classified as a restricted permanent endowment.
- Where the donor has specified a particular objective other than the acquisition or construction of tangible fixed assets, and that the University must or may convert the donated sum into income, the fund is classified as a restricted expendable endowment.

Other donations with substantially restricted purposes are included in restricted reserves until such time as the restrictions have been met.

Investment income

Investment income is recognised in income in the period in which it is earned.

f. Employee benefits

Short term benefits

Short term employment benefits including salaries and compensated absences are recognised as an expense in the period in which the service is rendered to the University. A liability is recognised at each balance sheet date for unused employee holiday allowances with the corresponding expense recognised in staff costs in the statement of comprehensive income.

Pension costs

The University contributes to a number of defined benefit pension schemes for certain employees. A defined benefit scheme defines the pension benefit that an employee will receive on retirement, dependent upon several factors including length of service and remuneration.

- (i) Where the University is unable to identify its share of the underlying assets and liabilities in a multi-employer scheme on a reasonable and consistent basis, it accounts as if the scheme were a defined contribution scheme, so that the cost is equal to the total of contributions payable in the year. Where the University has entered into an agreement with such a multi-employer scheme that determines how the University will contribute to a deficit recovery plan, the University recognises a liability for the contributions payable that arise from the agreement, to the extent that they relate to the deficit, and the resulting expense is recognised in expenditure.
- (ii) For other defined benefit schemes, the net liability recognised in the balance sheet in respect of each scheme is the present value of the defined benefit obligation at the reporting date less the fair value of the plan assets at the reporting date.

The defined benefit obligation is calculated using the projected unit credit method. Annually the University engages independent actuaries to calculate the obligation for each scheme. The present value is determined by discounting the estimated future payments at a discount rate based on market yields on high quality corporate bonds denominated in sterling with terms approximating to the estimated period of the future payments.

The fair value of a scheme's assets is measured in accordance with the FRS 102 fair value hierarchy and in accordance with the University's policy for similarly held assets. This includes the use of appropriate valuation techniques.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income. These amounts together with the return on plan assets, less amounts included in net interest, are disclosed as actuarial gains and losses.

The cost of the defined benefit plan, recognised in expenditure as staff costs, except where included in the cost of an asset, comprises the increase in pension benefit liability arising from employee service during the period and the cost of plan introductions, benefit changes, curtailments and settlements. The net interest cost is calculated by applying the discount rate to the net liability. This cost is recognised in expenditure as a finance cost.

Further detail is provided on the specific pension schemes in note 34 to the accounts.

g. Intangible assets and goodwill

Software development and acquisition costs are capitalised and amortised on a straight line basis over its estimated useful life of between four and ten years.

Goodwill arises on consolidation and is based on the fair value of the consideration given for the subsidiary and the fair value of its assets at the date of acquisition. Goodwill is amortised over its estimated economic life of between five and ten years on a straight line basis.

The carrying value of intangible assets including goodwill is considered in light of events or changes in circumstances which may indicate that the carrying value may not be recoverable. Where there is impairment in the carrying value of these assets, the loss is included in the results of the period.

h. Fixed assets

Land and buildings

Operational land and buildings are included in the financial statements using the FRS 102 fair value at 1 August 2014 as deemed cost, with subsequent additions at cost.

No depreciation is provided on freehold land. Freehold buildings are written off on a straight line basis over their estimated useful lives, which are between 15 and 60 years, and leasehold properties are written off over the length of the lease.

Assets under construction

Assets under construction are stated at cost. These assets not depreciated until they are available for use.

Equipment

Equipment costing less than £30,000 per individual item is typically written off in the year of purchase. All other equipment is capitalised and depreciated so that it is written off on a straight line basis over its estimated useful life of between three and ten years.

i. Heritage assets

The University holds and conserves a number of collections, exhibits, artefacts, and other assets of historical, artistic or scientific importance. Heritage assets acquired before 1 August 1999 have not been capitalised, since reliable estimates of cost or value are not available on a cost-benefit basis. Acquisitions since 1 August 1999 have been capitalised at cost or, in the case of donated assets, at expert valuation on receipt. In line with the accounting policy in respect of equipment, the threshold for capitalising assets is £30,000. Heritage assets are not depreciated since their long economic life and high residual value mean that any depreciation would not be material.

j. Investments

Non-current investments are included in the balance sheet at fair value, except for:

- (i) investments in subsidiary undertakings and joint ventures which are stated in the University's balance sheet at cost and eliminated on consolidation; and
- (ii) The North West Cambridge development, currently under construction, which is held at cost.

Other properties held for investment purposes are valued annually on the basis of estimated open market values on an existing use basis by Knight Frank or, in the case of local non-operational properties, by chartered surveyors employed by the University. Marketable securities are valued at midmarket valuation on 31 July. Investments in spin-out companies are valued in accordance with the International Private Equity and Venture Capital Guidelines, and other non-marketable securities are included at valuation by the Council. Current asset investments are included in the balance sheet at the lower of cost and net realisable value.

All gains and losses on investment assets are recognised in the statement of comprehensive income as they accrue.

k. Stocks and work in progress

Stocks are stated at the lower of cost and net realisable value after making provision for slow moving and obsolete items. In respect of publishing services, (a) direct costs incurred prior to publication are included in stocks and work in progress and are written off over a period of up to three years from the publication date; and (b) the University makes full provision against the cost of stock in excess of one and a half times the most recent year's sales on all publications dated more than two years before the reporting date.

I. Cash and cash equivalents

Cash includes cash in hand, cash at bank, deposits repayable on demand and bank overdrafts. Deposits are repayable on demand if they are in practice available on call without penalty. Bank overdrafts are shown within borrowings in current liabilities. Cash equivalents are short-term (typically with less than three months notice required) highly liquid investments which are readily convertible into cash and include deposits and other instruments held as part of the University's treasury management activities.

m. Financial instruments

The University has elected to adopt Sections 11 and 12 of FRS 102 in respect of the recognition, measurement and disclosure of financial instruments.

Financial assets

Basic financial assets include trade and other receivables, cash and cash equivalents. These assets are initially recognised at transaction price unless the arrangement constitutes a financing transaction, where the transaction is measured at the 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 rate method. Financial assets are assessed for indicators of impairment at each balance sheet date. If there is objective evidence of impairment, an impairment loss is recognised in the statement of comprehensive income.

For financial assets carried at amortised cost the impairment loss is the difference between the carrying amount of the asset and the present value of the estimated future cash flows, discounted at the asset's original effective interest rate.

Other financial assets, including investments in equity instruments which are not subsidiaries, associates or joint ventures are initially measured at fair value, which is typically the transaction price. These assets are subsequently carried at fair value and changes in fair value at the reporting date are recognised in the statement of comprehensive income. Where the investment in equity instruments is not publicly traded and where the fair value cannot be reliably measured the assets should be measured at cost less impairment.

Financial assets are de-recognised when the contractual rights to the cash flows from the asset expire or are settled or substantially all of the risks and rewards of ownership of the asset are transferred to another party.

Financial liabilities

Basic financial liabilities include trade and other payables, bank loans and inter-group loans. These liabilities 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 payments 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.

The University has debt instruments through long term unsecured Bonds issued in October 2012 and listed on the London Stock Exchange. The Bonds were initially measured at the proceeds of issue less all transaction costs directly attributable to the issue. After initial recognition, the Bonds are measured at amortised cost using the effective interest rate method. Under this method the discount at which the Bonds were issued and the transaction costs are accounted for as additional expense over the term of the Bonds (see note 27).

Trade payables are obligations to pay for goods and 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 rate method.

Derivatives, including forward foreign exchange contracts, are not basic financial instruments. Derivatives are initially recognised at fair value on the date the derivative contract is entered into and are subsequently re-measured at their fair value at the reporting date. Changes in the fair value of derivatives are recognised in the statement of comprehensive income in finance costs or finance income as appropriate, unless they are included in a hedging arrangement.

To the extent that the University enters into forward foreign exchange contracts which remain unsettled at the balance sheet date the fair value of the contracts is reviewed at that date. The initial fair value is measured as the transaction price on the date of inception of the contracts. Subsequent valuations are considered on the basis of the forward rates for those unsettled contracts at the balance sheet date. The University does not apply hedge accounting in respect of forward foreign exchange contracts held to manage cash flow exposures of forecast transactions denominated in foreign currencies.

Financial liabilities are de-recognised when the liability is discharged, cancelled, or expires.

n. Related party transactions

The University discloses transactions with related parties which are outlined in detail in note 38 to the accounts.

o. Segment information

The University operates in a number of different classes of business. For the purpose of segmental reporting, classes of business have been identified by reference to the nature of activity, the nature of funding, and the management organisation (see note 17).

4. Critical accounting judgements, estimates, and assumptions

Management is required to adopt those accounting policies most appropriate to the circumstances for the purposes of presenting fairly the University's financial position, financial performance, and cash flows. The preparation of the University's financial statements requires management to make judgements, estimates, and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. These judgements, estimates, and associated assumptions are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the related actual results.

Management consider the areas set out below to be those where critical accounting judgements have been applied and the resulting estimates and assumptions may lead to adjustments to the future carrying amounts of assets and liabilities:

(i) Revenue recognition

Revenues are subject to judgement over when and by how much revenues should be recognised in the financial statements. This includes determining when performance criteria have been met, recognising research and other funding revenues in line with expenditure once a right to the funding is deemed to have arisen, and determining the revenues associated with partially delivered courses and training where the activities have not been fully completed at the reporting date.

(ii) Depreciation and amortisation

The depreciation and amortisation expense is the recognition of the use of the asset over its estimated useful life. Judgements are made as to the estimated useful lives of the assets and associated residual values which may be impacted by changes in economic or technological circumstances.

4. Critical accounting judgements, estimates, and assumptions (continued)

(iii) Investment valuations (note 11)

The Cambridge University Endowment Fund is comprised of a range of asset investment categories where there is not always a clearly observable valuation basis available. Investments which are not listed or which are not frequently traded are stated at the Valuation Committee's best estimate of fair value. With respect to investments held through pooled funds or partnerships, reliance is placed on unaudited valuations of the underlying listed and unlisted investments as supplied to the CUEF custodian by the administrators of those funds or partnerships. The principles applied by the administrators to those valuations are reviewed to ensure they are in compliance with CUEF policies. With respect to other investments, recognised valuation techniques are used, that may take account of any recent arm's length transactions in the same or similar investment instruments. Where however no reliable fair value can be estimated, investments are stated at cost.

(iv) Valuation of investment properties

Properties held for investment purposes are revalued annually by accredited valuers on the basis of estimated open market values on an existing use basis. Such valuations are based on assumptions and judgements which are impacted by a variety of factors including changes in market and other economic conditions.

North West Cambridge is currently under construction and once completed will be subject to an annual valuation based on projected rental and other revenue driven cash flows. Depending on the assumptions used and judgement applied over estimates this may result in a valuation different to the current carrying value at cost.

(v) Defined benefit pension schemes and funding of pension deficits (note 28)

The University has obligations to pay pension benefits to certain employees. The cost of these benefits and the present value of the obligation depend on a number of factors including: life expectancy; salary increases; asset valuations; and the discount rate on corporate bonds. Based on actuarial advice provided, management estimate these factors to determine the net pension obligation in the balance sheet.

Additionally, FRS 102 makes the distinction between a group plan and a multi-employer scheme. A group plan consists of a collection of entities under common control typically with a sponsoring employer. A multi-employer scheme is a scheme for entities not under common control and represents (typically) an industry-wide scheme such as the Universities Superannuation Scheme (USS). The accounting for a multi-employer scheme where the employer has entered into an agreement with the scheme that determines how the employer will fund a deficit results in the recognition of a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and the resulting expense in profit or loss. Management is satisfied that the scheme provided by the USS meets the definition of a multi-employer scheme and has therefore recognised the discounted fair value of the contractual contributions under the funding plan in existence at the date of approving the financial statements.

(vi) Provisions

General and specific provisions are made for stock obsolescence including slow moving or defective items and bad debts based on a combination of management's best estimates, historical experience, customer and product specific knowledge, and formula based calculations.

	2017	2016	2017	2016
	Group	Group	University	University
	£m	£m	£m	£m
5 Tuition fees and education contracts				
Full-time home / EU students	131.9	122.0	131.9	122.0
Full-time overseas (non-EU) students	87.1	87.8	87.1	87.8
Other course fees	28.5	25.2	15.7	12.4
Research Training Support Grants	28.9	27.8	28.9	27.8
	276.4	262.8	263.6	250.0
6 Funding body grants				
Higher Education Funding Council for England (HEFCE)				
Recurrent grant: teaching	17.9	20.7	17.9	20.7
Recurrent grant: research	121.9	120.0	121.9	120.0
Other revenue grants	7.3	7.5	7.3	7.5
Total revenue grants	147.1	148.2	147.1	148.2
Capital grants recognised in the year	30.9	44.8	30.9	44.8
	178.0	193.0	178.0	193.0
7 Research grants and contracts				
Research councils	146.8	161.1	146.8	161.1
UK based charities	142.4	127.3	142.4	127.2
European Commission	59.2	61.5	59.2	61.5
UK industry	18.9	23.6	18.9	22.2
UK Government	46.1	49.6	46.1	49.3
Other bodies	52.6	45.9	44.1	41.1
	466.0	469.0	457.5	462.4

Total research grants and contracts income includes grants of £8.0m (2016: £7.8m) towards the cost of buildings and £26.7m (2016: £38.6m) for the purchase of equipment.

8	Examination and assessment services				
	Examination fees	371.1	349.2	296.3	276.0
	Other examination and assessment services	40.6	42.5	38.5	35.5
		411.7	391.7	334.8	311.5
9	Donations and endowments				
	New endowments	30.4	30.3	30.4	28.9
	Donations of, and for the purchase of, fixed assets	10.2	9.2	10.2	9.2
	Donations of, and for the purchase of, heritage assets	1.7	3.7	1.7	3.7
	Other donations with restrictions	25.4	15.0	18.0	8.5
	Donations from subsidiary companies	_	-	10.5	5.4
	Unrestricted donations	11.4	13.0	10.2	11.6
		79.1	71.2	81.0	67.3

		2017 Group £m	2016 Group £m	2017 University £m	2016 University £m
10	Other income	2111	2111	2111	ZIII
	Other services rendered	44.5	42.4	37.2	33.6
	Health and hospital authorities	20.5	19.9	20.5	19.9
	Residences, catering, and conferences	12.7	10.4	12.7	10.4
	Income from intellectual property	16.7	13.8	4.3	3.5
	Rental income	9.5	10.4	9.5	10.5
	Grants received (other than those included in notes 6 and 7 above)	4.8	5.0	3.7	4.1
	Research and Development Expenditure Credit (RDEC) receivable before deduction of tax	_	1.3	-	1.3
	Sundry income	21.5	18.0	18.8	15.5
		130.2	121.2	106.7	98.8

RDEC has previously been claimed from HM Revenue & Customs at a rate of 10% or 11% on qualifying research and development expenditure, and is received net of Corporation Tax (see note 16). The University is not eligible to claim for RDEC in relation to expenditure incurred on or after 1 August 2015.

11 Investment income

The majority of investment income relates to investment returns generated by the Cambridge University Endowment Fund (CUEF). The CUEF is a unitized fund constituted by Trust Deed with the University as sole trustee holding the property of the CUEF on trust for unit holders. Unit holders are the University, a number of its subsidiary undertakings and also UK charities associated with the University (such as Colleges and trusts) provided they meet the necessary eligibility requirements. The University operates the fund through its whollyowned subsidiary, Cambridge Investment Management Limited, to deliver long-term investment in respect of individual restricted endowments and other balances. The CUEF is managed on a total return basis (i.e. income and net capital gains) and invests in asset classes some of which generate little or no income. Distributions are made to unit holders according to a formula which has regard to the total return reasonably to be expected in the long term, in proportion to the number of units held. Unit holders receive distributions as income.

However, the distributions made to unit holders are funded through both investment income generated on the underlying CUEF assets and an element by drawing on the long-term capital growth of the investments. Accordingly, for the purposes of reporting in the financial statements, it is only the investment income (dividends, interest, rental income etc.) received on the underlying CUEF assets which is treated as investment income. The distributions relating to capital growth are reflected in the statement of comprehensive income as a 'gain on investments' and in the balance sheet in non-current asset investments, 'valuation gain on investment'. For the year ended 31 July 2017 distributions by the CUEF which were funded by drawing on the long-term capital gain in the investments was £78.0m (2016: £72.6m) with the balance of the distributions funded by and reported as investment income. This split is outlined in more detail below:

11 Investment income (continued)

	2017	2016	2017	2016
	Group	Group	University	University
	£m	£m	£m	£m
Income from non-current asset investments:				
Distributions credited to unit holders as income	94.0	91.9	76.0	75.0
Less: distributed from long-term capital gain	(78.0)	(72.6)	(63.1)	(59.2)
Investment income on underlying assets	16.0	19.3	12.9	15.8
reported per the financial statements				
Income from current asset investments and cash	1.9	2.0	1.7	2.1
equivalents				
Total investment income	17.9	21.3	14.6	17.9
Credited to:	Total	Amounts		
	distributions	distributed	Investment	Investment
	to unit holders	from capital	income	income
	2017	2017	2017	2016
Group	£m	£m	£m	£m
Permanent endowment reserves	36.7	(35.9)	0.8	4.9
Expendable endowment reserves	15.6	(13.3)	2.3	3.1
Restricted reserves	0.7	(0.6)	0.1	0.1
Unrestricted reserves	42.9	(28.2)	14.7	13.2
	95.9	(78.0)	17.9	21.3
University				
Permanent endowment reserves	36.5	(35.7)	0.8	4.8
Expendable endowment reserves	7.1	(5.9)	1.2	1.6
Restricted reserves	0.7	(0.6)	0.1	0.1
Unrestricted reserves	33.4	(20.9)	12.5	11.4
	77.7	(63.1)	14.6	17.9

Further detail on the asset categories held by the CUEF are outlined below:

	31 July 2017		31 Jul	y 2016
	£m	%	£m	%
Public equity	1,758.6	59.0 %	1,662.1	60.3%
Private investment	395.4	13.2%	327.4	11.9%
Absolute return	353.0	11.8%	360.1	13.1%
Credit	11.8	0.4%	11.5	0.4%
Real assets	337.2	11.3%	305.4	11.1%
Fixed interest / cash	128.4	4.3%	87.4	3.2%
Total value of fund	2,984.4	100.0%	2,753.9	100.0%

11 Investment income (continued)

Public equity includes all equity stocks traded on a liquid market, together with related non-publically traded index funds and derivatives.

Private investment includes investments where initial capital commitments are drawn down over a period, and the proceeds of the investments once disposed of are returned over the life of each fund. The underlying investments include both unlisted equities and corporate credits (such as bonds, loans and other claims).

Absolute return includes investments in trading strategies which are in some degree independent of overall equity market movements. Funds where different equities are simultaneously held (long) and sold (short) are included in this category.

Credit includes corporate securities (such as bonds and loans) traded on a liquid public market.

Real assets includes investments which are expected in some degree to increase in nominal value to match inflation. This category includes commercial property, and securities which reflect the level of commodity values. Inflation-linked government securities are, however, included in the fixed interest category below.

Fixed interest / cash includes cash at bank and on deposit, government securities, the net value of foreign currency contracts and any amounts receivable in general, less amounts payable, including those arising from holding derivative contracts.

The assets of the CUEF are included in the following balance sheet captions in proportion to the number of units held by the relevant funds:

	2017 Group	2016 Group	2017 University	2016 University
	£m	£m	£m	£m
Non current asset investments (see note 21) Current asset investments (see note 24) - balances held on behalf of:	2,689.6	2,564.2	2,161.1	2,093.6
	Г			
Subsidiary undertakings	_	_	528.5	470.6
Colleges	277.3	176.7	277.3	176.7
Other associated bodies	17.5	13.0	17.5	13.0
Total included in current asset investments	294.8	189.7	823.3	660.3
Total value of units	2,984.4	2,753.9	2,984.4	2,753.9

12 Total income

Consolidated total income is credited to reserves as follows:

	Group yea	Group year ended 31 July 2017			Group year ended 31 July 2016		
	Endowments	Restricted	Unrestricted	Endowments Restricted		Unrestricted	
	£m	£m	£m	£m	£m	£m	
Tuition fees and education contracts	_	_	276.4	_	_	262.8	
Funding body grants	_	30.9	147.1	_	44.8	148.2	
Research grants and contracts	_	7.6	458.4	_	17.4	451.6	
Research and Development Expenditure Credit receivable	'e –	-	-	_	-	1.3	
Examination and assessment services	_	_	411.7	_	_	391.7	
Publishing services	_	_	310.6	_	_	269.4	
Donations and endowments	30.4	29.3	19.4	30.3	20.3	20.6	
Other income	_	4.8	125.4	_	5.0	114.9	
Investment income	3.1	0.1	14.7	8.0	0.1	13.2	
	33.5	72.7	1,763.7	38.3	87.6	1,673.7	

Consolidated total income is attributable as follows to the three broad categories defined by FRS 102: revenue, government grants and non-exchange transactions:

	Revenue	Government grants	Non- exchange transactions	Revenue	Government grants	Non- exchange transactions
	£m	£m	£m	£m	£m	£m
Tuition fees and education contracts	247.5	28.9	_	235.0	27.8	_
Funding body grants	_	178.0	_	_	193.0	_
Research grants and contracts	_	252.1	213.9	_	272.2	196.8
Research and Development Expenditure Credit receivable	-	-	-	_	1.3	-
Examination and assessment services	411.7	_	_	391.7	_	_
Publishing services	310.6	_	_	269.4	_	_
Donations and endowments	_	_	79.1	_	_	71.2
Other income	103.9	4.8	21.5	96.9	5.0	18.0
Investment income	17.9	-	_	21.3	_	_
	1,091.6	463.8	314.5	1,014.3	499.3	286.0

13	Staff costs	2017	2016	2017	2016
		Group	Group	University	University
		£m	£m	£m	£m
	Wages and salaries	606.0	572.8	555.3	529.5
	Social security costs	61.9	56.9	58.0	52.6
	Pension costs:	01.5	30.5	30.0	32.0
	Current service cost	132.5	114.2	126.2	108.7
	Change in underlying assumptions in calculating	132.3	114.2	120.2	100.7
	USS deficit recovery provision (see note 28)	(1.6)	17.6	(1.2)	17.1
	••				
	Total pension costs (see note 34)	130.9	131.8	125.0	125.8
		798.8	761.5	738.3	707.9
	The average number of staff employed in the year, expressed as full-time equivalents, was:	15,989	15,287		
	Remuneration of the Vice-Chancellor			2017	2016
				£000	£000
	Salary for the year			343	323
	Backdated increase in respect of the previous year			-	22
	Total salary paid in the year			343	345
	Taxable benefits in kind			12	4
	Total excluding employer pension contributions			355	349
	Employer pension contributions			7	4
				362	353

Salary is the contractual salary before adjusting for salary sacrifice arrangements under which, in common with other employees, the Vice-Chancellor sacrificed an amount of pay and the University paid the same amount to the Universities Superannuation Scheme. In addition to the taxable benefits in kind received, the Vice-Chancellor is also provided with subsidised accommodation. This is a non-taxable benefit and as such is not included in the table above.

13 Staff costs (continued)

Remuneration of other higher paid staff

Remuneration for this purpose excludes employer's pension contributions except to the extent that these result from the sacrifice of an element of pay.

	2017	2016
£100,001 - £110,000	109	104
£110,001 - £120,000	102	74
£120,001 - £130,000	47	44
£130,001 - £140,000	46	41
£140,001 - £150,000	27	35
£150,001 - £160,000	38	26
£160,001 - £170,000	24	17
£170,001 - £180,000	16	14
£180,001 - £190,000	6	7
£190,001 - £200,000	8	13
£200,001 - £210,000	12	13
£210,001 - £220,000	12	2
£220,001 - £230,000	3	1
£230,001 - £240,000	2	2
£240,001 - £250,000	7	3
£250,001 - £260,000	3	3
£260,001 - £270,000	1	_
£270,001 - £280,000	_	-
£280,001 - £290,000	1	-
£290,001 - £300,000	1	2
£300,001 - £310,000	1	2
£310,001 - £320,000	_	1
£320,001 - £330,000	_	1
£330,001 - £340,000	1	1
£350,001 - £360,000	2	1
£380,001 - £390,000	_	1
£390,001 - £400,000	_	_
£400,001 - £410,000	1	-
£420,001 - £430,000	1	1
£470,001 - £480,000	1	_
£640,001 - £650,000	1	_

The above statistics include staff engaged in business and commercial activities, including those of Cambridge Assessment and Cambridge University Press. A small number of employees received an adjustment for backdated pay in the period and a small number of staff were eligible for bonuses. Salaries for certain staff working overseas in Cambridge Assessment when expressed in sterling terms have increased owing to exchange rate movements.

As in previous years, the above statistics include additional payments to employees of the University on behalf of NHS bodies.

14

13 Staff costs (continued)

Con	npensation for loss of office						
						2017	2016
						£000	£000
	Aggregate payments for compensation of staff earning in excess of £100,000 pe					525	200
	Payments in respect of loss of office					535	290
Key	management personnel The total remuneration of the Vice-Char Officer (from 1 May 2017) and Registrary excluding employer pension contribution	for the	year, compri			1,333	1,090
l Ana	lysis of consolidated expenditure by act	ivity					
			Other				
		Staff	Operating		Interest	2017	2016
		costs	expenses	Depreciation	payable	Total	Total
		£m	£m	£m	£m	£m	£m
	demic departments	241.1	71.5	9.9	_	322.5	307.2
	demic services	31.3	13.4	0.9	-	45.6	41.5
	ments to Colleges (see note 37)	_	67.3	_	-	67.3	64.1
	earch grants and contracts	204.9	166.1	21.9	_	392.9	377.2
Oth	er activities:						
	Examination and assessment services	121.2	207.4	6.9	0.2	335.7	335.7
	Publishing services	103.4	187.6	4.2	3.7	298.9	274.4
	Other services rendered	12.6	27.7	0.1	_	40.4	38.7
	Intellectual property	3.4	4.6	_	_	8.0	9.7
	Residences, catering and conferences	3.0	11.6		_	14.6	14.2
Oth	er activities total	243.6	438.9	11.2	3.9	697.6	672.7
Adn	ninistration and central services:						
	Administration	53.4	1.0	1.8	_	56.2	52.6
	General educational	2.6	55.9	0.1	_	58.6	58.2
	Staff and student facilities	3.0	1.0	-	_	4.0	4.4
	Development office	5.8	6.1	_	_	11.9	12.6
	Other	0.9	3.1	_	_	4.0	4.0
Adn	ninistration and central services total	65.7	67.1	1.9	_	134.7	131.8
Prer	nises	17.4	62.1	44.1	_	123.6	100.5
Inte	rest payable on bond liabilities	_	_	-	13.2	13.2	13.2
Pen	sion cost adjustments for USS	(9.5)	_	_	2.1	(7.4)	16.3
	sion cost adjustments for CPS (see note 34)	4.3	_	_	12.2	16.5	9.3
Tota	l per income and expenditure account	798.8	886.4	89.9	31.4	1,806.5	1,733.8

14 Analysis of consolidated expenditure by activity (continued)

Other operating expenses include:	2017 Group	2016 Group
Auditors' remuneration	£000	£000
Audit fees payable to the University's external auditors	882	781
Other fees payable to the University's external auditors	23	202
Audit fees payable to other firms	22	26
Payments to trustees		
Reimbursement of expenses to two (2016: three) external members of Council There were no other payments made to trustees for their services to the University.	6	5

These amounts include related irrecoverable VAT.

Interest and other finance costs	2017	2016	2017	2016
	Group	Group	University	University
	£m	£m	£m	£m
Interest payable on bond liabilities (see note 27)	13.2	13.2	13.2	13.2
Interest on pension liabilities (see note 28)	17.3	18.8	17.3	18.7
Interest paid on other retirement benefit liabilities (see note 29)	0.6	0.7	0.6	0.7
Other interest payable	0.3	0.4	0.3	0.3
	31.4	33.1	31.4	32.9
Taxation				
UK Corporation Tax	_	0.3	-	0.3
Foreign taxes	4.1	2.7	0.8	1.4
	4.1	3.0	0.8	1.7
	Interest payable on bond liabilities (see note 27) Interest on pension liabilities (see note 28) Interest paid on other retirement benefit liabilities (see note 29) Other interest payable Taxation UK Corporation Tax	Interest payable on bond liabilities (see note 27) Interest on pension liabilities (see note 28) Interest paid on other retirement benefit liabilities (see note 29) Other interest payable Other interest payable UK Corporation Tax - Foreign taxes Group £m 13.2 17.3 17.4 17.3	Interest payable on bond liabilities (see note 27) Interest on pension liabilities (see note 28) Interest paid on other retirement benefit liabilities (see note 29) Other interest payable Other interest payable UK Corporation Tax Foreign taxes Group £m £m £m 13.2 13.2 13.2 17.3 18.8 17.3	Group Group Em Em Em Em Em Em Em E

The University has charitable status as one of the exempt charities listed in Schedule 3 to the Charities Act 2011. As such it is listed as a charity within the meaning of Paragraph 1 of Schedule 6 to the Finance Act 2010. Accordingly the University is potentially exempt from Corporation Tax on income and gains falling within section 287 of the Corporation Tax Act (CTA) 2009 and sections 471 and 478-488 CTA 2010 or section 256 of the Taxation and Chargeable Gains Act 1992 to the extent that such income or gains are applied to exclusively charitable purposes.

Most of the University's principal activities are exempt from Value Added Tax 'VAT', but certain activities and other ancillary supplies and services are liable to VAT at various rates. Expenditure includes VAT charged by suppliers to the University where it is not recoverable and is likewise included in the cost of fixed assets.

Commercial trading activities undertaken by the University are operated through its subsidiary companies. This income will attract applicable VAT and the profits are liable to Corporation Tax. However, the taxable profits made by these companies are covenanted to the University and paid under Gift Aid which negates the liability.

Due to its exempt charity status the charge for UK Corporation Tax in 2015-16 is solely in respect of Research and Development Expenditure Credit grants receivable (see note 10). The charge for foreign taxes is primarily in respect of overseas subsidiaries which are subject to taxation in their country of residence.

17 Segment information

The group's reportable segments are:

Higher Education Institution (HEI)Teaching and research undertaken by the University

Assessment Examination and assessment services, carried out by the University

of Cambridge Examinations Syndicate and subsidiary undertakings,

collectively known as Cambridge Assessment

Press Publishing services, carried out by the Cambridge University Press

Syndicate and subsidiary undertakings

Cambridge University Endowment

Fund (CUEF)

The investment fund managed by the group and holding the majority of the group's investments together with some investments of

Colleges and other associated bodies (see note 11).

Trusts and other The combination of smaller segments including the associated trusts

and subsidiary companies not included in the Assessment and Press $\,$

groups

The Council monitors the results of operating segments separately for the purposes of assessing performance and making decisions about the allocation of resources. Segment performance is evaluated based on reported surplus. The Press segment reports for financial years ending 30 April. CUEF reports for financial years ending 30 June and focuses on total return as the measure of income and surplus. The segment information presented below uses the same measures as reported by each segment, adjusted for Press and CUEF to the financial year ended 31 July.

	HEI A	Assessment	Press	CUEF	and	Eliminations and adjustments	Group
	£m	£m	£m	£m	£m	£m	£m
Year ended 31 July 2017							
Total income							
External	1,075.6	412.8	318.3	422.7	52.0	(411.5)	1,869.9
Intersegment	104.2	7.6	0.6	_	118.9	(231.3)	_
Total	1,179.8	420.4	318.9	422.7	170.9	(642.8)	1,869.9
Surplus for the year	325.4	104.6	10.3	422.7	63.4	(460.0)	466.4
Included in surplus for the year:							
Investment income	71.9	7.7	1.3	12.1	15.0	(90.1)	17.9
Depreciation and amortisation	(78.2)	(19.0)	(15.4)	_	(0.6)	_	(113.2)
Interest payable	(27.2)	(0.6)	(3.7)	_	_	0.1	(31.4)
Gain on investments	245.7	26.5	1.8	410.5	55.2	(332.6)	407.1
Additions to intangible assets, fixed assets, heritage assets							
and investment property	332.6	118.8	15.8	_	1.2	(8.0)	467.6
Assets	5,111.8	734.0	326.5	2,984.4	526.1	(2,821.9)	6,860.9
Liabilities	(1,384.4)	(138.6)	(240.5)	_	(78.4)	(171.9)	(2,013.8)
Net assets	3,727.4	595.4	86.0	2,984.4	447.7	(2,993.8)	4,847.1

17 Segment information (continued)

	HEI £m	Assessment £m	Press £m	CUEF £m	Trusts and other £m	Eliminations and adjustments £m	Group £m
Year ended 31 July 2016		2111	2			2	2
Total income							
External	1,066.4	394.6	274.4	235.6	49.6	(221.0)	1,799.6
intersegment	90.2	7.2	0.6	_	105.8	(203.8)	
Total	1,156.6	401.8	275.0	235.6	155.4	(424.8)	1,799.6
Surplus for the year	206.6	72.5	-	235.6	31.3	(261.4)	284.6
Included in surplus for the year:							
Investment income	71.8	7.4	0.8	15.5	13.2	(87.4)	21.3
Depreciation and amortisation	(67.6)	(22.1)	(9.2)	_	(0.3)	(1.2)	(100.4)
Interest payable	(28.3)	(0.9)	(3.9)	_	_	-	(33.1)
Gain on investments	114.2	10.5	0.9	220.1	24.3	(148.2)	221.8
Additions to intangible assets, fixed assets, heritage assets and investment							
property	348.2	58.9	17.2	_	1.0	(0.8)	424.5
Assets	4,831.7	645.5	253.2	2,753.9	467.4	(2,667.0)	6,284.7
Liabilities	(1,428.8)	(131.4)	(243.9)	-	(76.3)	(49.5)	(1,929.9)
Net assets	3,402.9	514.1	9.3	2,753.9	391.1	(2,716.5)	4,354.8

Eliminations and adjustments

The following eliminations and adjustments reconcile the totals of segment measures to the consolidated measures reported in these financial statements.	2017 £m	2016 £m
Total income		
Elimination of intersegment income	(231.3)	(203.8)
Exclude investment gain element of CUEF total return	(410.5)	(220.1)
Exclude CUEF investment income attributable to external investors	(1.0)	(0.9)
Total eliminations and adjustments	(642.8)	(424.8)
Surplus for the year		
Eliminate CUEF surplus recognised in other segments or attributable to external investors	(422.7)	(235.6)
Eliminate transfers from other segments to HEI based on surpluses	(37.2)	(23.9)
Apply group accounting policy to Press operational property: depreciation	-	(1.0)
Elimination of intersegment funding commitments	(0.3)	(0.3)
Eliminate intersegment surplus on transfer of fixed assets	(0.7)	(0.6)
Eliminate other intersegment balances	0.9	
Total eliminations and adjustments	(460.0)	(261.4)

17 Segment information (continued)

Assets and liabilities	2017 Assets £m	2017 Liabilities £m	2017 Net assets £m	2016 Net assets £m
Eliminate CUEF assets recognised in other segments or attributable to external investors	(2,689.6)	(294.8)	(2,984.4)	(2,753.9)
Apply group accounting policy to Press operational property: net book value	-	_	-	43.0
Eliminate accrual for intersegment funding commitments	-	17.0	17.0	17.3
Eliminate intersegment surplus on transfers of fixed assets	(20.4)	_	(20.4)	(19.6)
Eliminate investments in subsidiaries	(6.0)	_	(6.0)	(3.3)
Elimate intersegment balances	(105.9)	105.9	-	
Total eliminations and adjustments	(2,821.9)	(171.9)	(2,993.8)	(2,716.5)

18 Intangible assets and goodwi				2017	2016
	Software	Goodwill	Others	Total	Total
Group	£m	£m	£m	£m	£m
Cost					
At 1 August	183.9	16.1	9.1	209.1	183.8
Additions	24.3	_	0.5	24.8	26.0
Disposals	(0.8)	_	_	(8.0)	(1.0)
Currency adjustments	0.4	0.1	_	0.5	0.3
At 31 July	207.8	16.2	9.6	233.6	209.1
Accumulated amortisation					
At 1 August	110.9	14.5	8.3	133.7	111.3
Charge for the year	21.9	1.0	0.4	23.3	23.3
Eliminated on disposals	(0.4)	_	_	(0.4)	(1.0)
Currency adjustments	0.4	_	_	0.4	0.1
At 31 July	132.8	15.5	8.7	157.0	133.7
Net book value	75.0	0.7	0.9	76.6	75.4
				2017	2016
	Software	Goodwill	Others	Total	Total
University	£m	£m	£m	£m	£m
Cost					
At 1 August	175.7	1.1	13.1	189.9	165.1
Additions	23.6	_	0.5	24.1	25.8
Disposals	(8.0)	_	_	(8.0)	(1.0)
Currency adjustments	0.1	-	-	0.1	-
At 31 July	198.6	1.1	13.6	213.3	189.9
Accumulated amortisation					
At 1 August	103.3	1.1	11.6	116.0	94.9
Charge for the year	22.8	_	0.8	23.6	22.1
Eliminated on disposals	(0.4)	_	-	(0.4)	(1.0)
Currency adjustments	0.1	-	_	0.1	-
At 31 July	125.8	1.1	12.4	139.3	116.0
Net book value	72.8		1.2	74.0	73.9

Amortisation of intangibles is included within 'other operating expenses' in the statement of comprehensive income.

19	Fixed assets	Land	Buildings	Assets in construction	Equipment	2017 Total	2016 Total
	Group	£m	£m	£m	£m	£m	£m
	Cost						
	At 1 August	421.0	1,602.5	223.3	329.2	2,576.0	2,340.9
	Additions	_	30.6	253.5	45.0	329.1	247.3
	Transfers	1.3	104.1	(106.9)	1.5	_	-
	Transfers (to)/from investment properties	(0.2)	1.8	_	_	1.6	_
	Disposals	_	(3.0)	_	(5.4)	(8.4)	(12.5)
	Currency adjustments		0.6	_	(1.4)	(8.0)	0.3
	At 31 July	422.1	1,736.6	369.9	368.9	2,897.5	2,576.0
	Accumulated depreciation						
	At 1 August	_	92.1	_	234.9	327.0	260.6
	Charge for the year	_	50.0	_	39.9	89.9	77.1
	Transfers (to)/from investment properties	_	(0.2)	_	_	(0.2)	-
	Elimination on disposals	_	(2.6)	_	(5.3)	(7.9)	(10.8)
	Currency adjustments		0.3		0.2	0.5	0.1
	At 31 July		139.6	_	269.7	409.3	327.0
	Net book value						
	At 31 July	422.1	1,597.0	369.9	99.2	2,488.2	2,249.0
	At 1 August	421.0	1,510.4	223.3	94.3	2,249.0	2,080.3
	University			Assets in		2017	2016
	University	Land	Buildinas		Equipment		2016 Total
	University	Land £m	Buildings £m	Assets in construction £m	Equipment £m	Total	Total
	University Cost	Land £m		construction			
	Cost At 1 August			construction		Total	Total £m 2,331.3
	Cost At 1 August Additions	£m 421.0	£m 1,595.1 30.4	construction £m 224.1 254.3	£m 325.5 43.1	Total £m	Total £m
	Cost At 1 August Additions Transfers	£m 421.0 - 1.3	£m 1,595.1 30.4 104.0	construction £m 224.1	£m 325.5 43.1 1.5	Total £m 2,565.7 327.8	Total £m 2,331.3
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties	£m 421.0 - 1.3 (0.2)	£m 1,595.1 30.4 104.0 1.8	construction £m 224.1 254.3	£m 325.5 43.1 1.5	Total £m 2,565.7 327.8 - 1.6	Total £m 2,331.3 245.9 —
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals	£m 421.0 - 1.3	£m 1,595.1 30.4 104.0 1.8 (0.8)	construction £m 224.1 254.3	£m 325.5 43.1 1.5 - (5.0)	Total £m 2,565.7 327.8 - 1.6 (5.8)	Total £m 2,331.3 245.9 - (11.7)
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 (5.0) (1.6)	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1)	Total £m 2,331.3 245.9 - (11.7) 0.2
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals	£m 421.0 - 1.3 (0.2)	£m 1,595.1 30.4 104.0 1.8 (0.8)	construction £m 224.1 254.3	£m 325.5 43.1 1.5 (5.0) (1.6)	Total £m 2,565.7 327.8 - 1.6 (5.8)	Total £m 2,331.3 245.9 - (11.7)
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 (5.0) (1.6)	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year Transfers (to)/from investment properties	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0 89.1 49.6 (0.2)	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9 (0.2)	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7 256.6 76.2 -
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year Transfers (to)/from investment properties Elimination on disposals	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0 89.1 49.6 (0.2) (0.4)	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3 - (5.0)	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9 (0.2) (5.4)	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7 256.6 76.2 - (10.3)
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year Transfers (to)/from investment properties Elimination on disposals Currency adjustments	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0 89.1 49.6 (0.2) (0.4) (0.1)	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3 - (5.0) 0.2	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9 (0.2) (5.4) 0.1	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7 256.6 76.2 - (10.3) 0.1
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year Transfers (to)/from investment properties Elimination on disposals Currency adjustments At 31 July	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0 89.1 49.6 (0.2) (0.4)	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3 - (5.0)	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9 (0.2) (5.4)	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7 256.6 76.2 - (10.3)
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year Transfers (to)/from investment properties Elimination on disposals Currency adjustments At 31 July Net book value	£m 421.0 - 1.3 (0.2) -	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0 89.1 49.6 (0.2) (0.4) (0.1)	224.1 254.3 (106.8)	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3 - (5.0) 0.2	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9 (0.2) (5.4) 0.1 404.0	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7 256.6 76.2 - (10.3) 0.1
	Cost At 1 August Additions Transfers Transfers (to)/from investment properties Disposals Currency adjustments At 31 July Accumulated depreciation At 1 August Charge for the year Transfers (to)/from investment properties Elimination on disposals Currency adjustments At 31 July	£m 421.0 - 1.3 (0.2) - 422.1	£m 1,595.1 30.4 104.0 1.8 (0.8) 0.5 1,731.0 89.1 49.6 (0.2) (0.4) (0.1) 138.0	construction £m 224.1 254.3 (106.8) 371.6	£m 325.5 43.1 1.5 - (5.0) (1.6) 363.5 233.5 37.3 - (5.0) 0.2 266.0	Total £m 2,565.7 327.8 - 1.6 (5.8) (1.1) 2,888.2 322.6 86.9 (0.2) (5.4) 0.1 404.0	Total £m 2,331.3 245.9 - (11.7) 0.2 2,565.7 256.6 76.2 - (10.3) 0.1 322.6

19 Fixed assets (continued)

Building additions in the year include assets held under long term lease agreements which were signed on 26 September 2016 and 24 March 2017. The leases are for a duration of 170 years. The cost of the assets acquired under lease and included in the above table is £27.7m.

20	Heritage assets	2017 Group £m	2016 Group £m	2017 University £m	2016 University £m
	Opening balance Additions in the year	65.1 2.2	60.9 4.2	65.1 2.2	60.9 4.2
	Closing balance	67.3	65.1	67.3	65.1

The University holds and conserves certain collections, artefacts and other assets of historical, artistic or scientific importance. Most of these are housed in the University's nationally accredited museums and collections and in its libraries, providing a valuable research and educational resource locally, nationally and internationally as well as an unrivalled opportunity to present the University's work to a wide audience. Other collections are held in academic departments or are on display as public art. Major collections include those held by the University Library, a legal deposit, the Botanic Garden, and the Fitzwilliam Museum.

In respect of its major collections, the University's practice, in accordance with the national accreditation standards, is: to preserve, conserve, and manage the objects in its care; to augment the collections where appropriate and within the resources available; to enable and encourage access to and use of the collections for teaching and research; and to enable wide access to and engagement with the collections by members of the public.

As stated in the statement of principal accounting policies, heritage assets acquired since 1 August 1999 have been capitalised. The majority of assets held in the University's collections were acquired before 1 August 1999; because reliable estimates of cost or valuation are not available for these on a cost-benefit basis they have not been capitalised. As a result the total included in the balance sheet is partial.

Additions for the current and previous four years were as follows:	2017	2016	2015	2014	2013
	£m	£m	£m	£m	£m
Acquisitions purchased with specific donations	1.3	1.2	1.1	0.4	4.0
Value of acquisitions by donation	0.4	2.5	0.4	0.1	11.6
Total acquired by, or funded by, donations	1.7	3.7	1.5	0.5	15.6
Acquisitions purchased with University funds	0.5	0.5	_	0.5	0.7
Total acquisitions capitalised	2.2	4.2	1.5	1.0	16.3

21	Non-current asset investments	2017 Group £m	2016 Group £m	2017 University £m	2016 University £m
	One to the leave	20044	2.600.2	2 420 0	2.256.1
	Opening balance	2,904.4	2,688.2	2,439.8	2,256.1
	North West Cambridge: additions	111.5	141.8	111.5	141.8
	North West Cambridge: disposals at cost and transfers to fixed assets	_	(23.7)	_	(23.7)
	Other additions in the year	69.8	75.2	71.3	68.2
	Other disposals in the year	(317.7)	(197.7)	(300.2)	(181.6)
	Other transfers (to)/from other balance sheet accounts	(1.9)	(1.2)	(1.9)	(1.2)
	Valuation gains on investments	407.1	221.8	325.9	180.2
	Closing balance	3,173.2	2,904.4	2,646.4	2,439.8
	Represented by:				
	CUEF units (see note 11)	2,689.6	2,564.2	2,161.1	2,093.6
	North West Cambridge development	332.1	220.6	332.1	220.6
	Other property	75.0	67.4	75.0	67.4
	Securities	21.7	21.4	11.3	9.8
	Spin-out and similar companies (see note 35)	49.5	26.3	31.4	16.3
	Investments in subsidiary undertakings	_	_	34.8	31.4
	Other	5.3	4.5	0.7	0.7
		3,173.2	2,904.4	2,646.4	2,439.8

Phase 1 of the North West Cambridge development, currently under construction, includes accommodation for University staff and students and for others, infrastructure and community facilities. Individual buildings considered at completion to have a primary purpose of supporting education are transferred to fixed assets.

22	Stocks and work in progress	2017 Group £m	2016 Group £m	2017 University £m	2016 University £m
	Goods for resale	25.2	25.0	20.9	19.1
	Pre-publication costs and other work in progress	23.1	27.0	21.5	25.2
	Other stocks	1.3	1.3	1.3	1.3
		49.6	53.3	43.7	45.6
23	Trade and other receivables				
	Amounts due within one year				
	Research grants recoverable	105.6	100.1	105.4	100.1
	Amounts due from subsidiary undertakings	_	_	30.2	39.4
	Debtors re examination and assessment services	88.4	84.5	86.3	82.7
	Debtors re publishing services	112.7	99.8	88.6	78.8
	Other debtors	73.2	83.2	58.7	68.0
		379.9	367.6	369.2	369.0

24	Current asset investments	2017 Group £m	2016 Group £m	2017 University £m	2016 University £m
	CUEF units held on behalf of other entities (see note 11) Securities	294.8	189.7	823.3	660.3
	Money market investments	43.5	40.6	43.5	22.6
	Other	6.5	11.4	6.5	11.4
		344.8	241.7	873.3	694.3
25	Cash and cash equivalents				
	Money market investments with maturity less than three months	194.3	240.1	194.3	240.1
	Cash at bank and in hand and with investment managers	87.0	88.1	51.6	51.6
		281.3	328.2	245.9	291.7
26	Creditors: amounts falling due within one year				
	Bank overdraft	_	33.9	_	33.9
	Current portion of long-term bank loan	8.0	0.9	0.8	0.9
	Finance leases	1.3	1.3	1.3	1.3
	Research grants received in advance	192.7	190.5	192.7	189.1
	Amounts due to subsidiary undertakings	-	-	11.7	20.0
	Creditors re examination and assessment services	85.1	81.1	63.8	59.3
	Creditors re publishing services	111.3	94.7	99.5	84.2
	Other creditors	206.1	194.4	178.2	165.4
	Investments and cash equivalents held on behalf of subsidiary undertakings	-	-	557.7	477.9
	Investments and cash equivalents held on behalf of Colleges and other associated bodies	298.7	195.5	298.7	195.5
	and other associated bodies	896.0	792.3	1,404.4	1,227.5
			7,72.3	1,101.1	1,227.3
27	Creditors: amounts falling due after more than one year				
	Bond liabilities	342.5	342.5	342.5	342.5
	Bank loans	0.7	1.7	_	0.5
	Finance leases	2.6	3.9	2.6	3.9
	Accruals and deferred income	10.5	10.6	_	-
		356.3	358.7	345.1	346.9

On 17 October 2012 the University issued £350m of 3.75% unsecured Bonds due October 2052 (the "Bonds"). The Bonds were issued at 98.168% of their principal amount. The proceeds of issue, less directly attributable transaction costs, amounted to £342m. Interest at 3.75% pa is payable on 17 April and 17 October each year commencing on 17 April 2013. The Bonds are listed on the London Stock Exchange. Unless previously redeemed, the Bonds will be redeemed at their principal amount of £350m on 17 October 2052. The Bonds are initially measured at the proceeds of issue less all transaction costs directly attributable to the issue. After initial recognition, the Bonds are measured at amortised cost using the effective interest rate method. Under this method the discount at which the Bonds were issued and the transaction cost are accounted for as additional interest expense over the term of the Bonds.

28	Pension liabilities			Defined	USS deficit	Total	Total
		CPS	Press	benefit total	recovery	2017	2016
	Group	£m	£m	£m	£m	£m	£m
	Opening balance Movement in year:	505.0	124.1	629.1	127.4	756.5	550.5
	Current service cost	31.4	2.0	33.4	_	33.4	26.4
	Contributions	(28.2)	(5.3)	(33.5)	(7.9)	(41.4)	(38.8)
	Administration expenses	1.0	_	1.0	_	1.0	0.5
	Interest on liability	12.2	3.0	15.2	2.1	17.3	18.8
	Currency adjustments	_	0.1	0.1	_	0.1	0.7
	Change in underlying assumptions	_	_	_	(1.5)	(1.5)	17.6
	Actuarial (gain)/loss	1.0	(27.3)	(26.3)	-	(26.3)	180.8
	Closing balance	522.4	96.6	619.0	120.1	739.1	756.5
	University						
	Opening balance	505.0	124.1	629.1	121.8	750.9	545.3
	Movement in year:						
	Current service cost	31.4	2.0	33.4	_	33.4	26.4
	Contributions	(28.2)	(5.3)	(33.5)	(7.6)	(41.1)	(38.6)
	Administration expenses	1.0	_	1.0	_	1.0	0.5
	Interest on liability	12.2	3.0	15.2	2.1	17.3	18.7
	Currency adjustments	_	0.1	0.1	_	0.1	0.7
	Change in underlying assumptions	_	_	_	(1.2)	(1.2)	17.1
	Actuarial (gain)/loss	1.0	(27.3)	(26.3)	_	(26.3)	180.8
	Closing balance	522.4	96.6	619.0	115.1	734.1	750.9

The net liabilities in respect of the Cambridge University Assistants' Contributory Pension Scheme (CPS) and the Press defined benefit schemes represent the present value of the schemes' obligations to provide future benefits in relation to past service, less the assets of the schemes. For additional information please refer to note 34.

The liability in respect of deficit recovery payments to the Universities Superannuation Scheme (USS) represents the present value of estimated future employer contributions to the USS to the extent that, under the schedule of contributions agreed between the USS and participating employers in July 2015, they are payments towards the recovery of the deficit identified in the actuarial valuation as at 31 March 2014. For this purpose estimated deficit recovery payments over the period of the schedule of contributions ending in March 2031 have been discounted at 1.89% (2016: 1.75%). The movements described as "change in underlying assumptions" include the impact of movements in discount rates. The resulting decrease in provision in 2016-17 is included in staff costs (see note 13).

29 Other retirement benefits liabilities

	2017	2016
Group and University	£m	£m
Opening balance	22.4	19.8
Movement attributable to the year:		
Current service cost less benefits paid	0.3	0.3
Contributions	(1.0)	(8.0)
Other finance cost	0.6	0.7
Currency adjustments	0.1	1.0
Actuarial loss	_	1.4
Closing balance	22.4	22.4

These liabilities arise in relation to unfunded post-retirement medical and insurance schemes.

30	Endowment reserves			2017	2016
		Permanent	Expendable	Total	Total
	Group	£m	£m	£m	£m
	Balance as at 1 August	1,045.8	473.4	1,519.2	1,414.0
	New endowments received	28.1	2.3	30.4	30.4
	Transfers	(0.1)	0.1	_	-
	Investment income	0.8	2.3	3.1	8.0
	Expenditure	(32.1)	(19.7)	(51.8)	(49.7)
	Valuation gains on investments	159.9	67.1	227.0	116.5
	Balance as at 31 July	1,202.4	525.5	1,727.9	1,519.2
	Capital	1,042.3	499.3	1,541.6	1,357.1
	Unspent income	160.1	26.2	186.3	162.1
	Balance as at 31 July	1,202.4	525.5	1,727.9	1,519.2
	Representing:				
	Trust and Special Funds:				
	Professorships, Readerships, and Lectureships	608.5	75.5	684.0	591.5
	Scholarships and bursaries	149.2	20.2	169.4	151.7
	Other	369.0	155.0	524.0	506.6
	Gates Cambridge Trust	_	268.7	268.7	239.6
	Examination Board restricted funds	_	6.1	6.1	5.5
	General endowments	75.7	_	75.7	24.3
	Group total	1,202.4	525.5	1,727.9	1,519.2

Permanent Expendable Total Total	30	Endowment reserves (continued)				2017	2016
Balance as at 1 August 1,040.2 228.7 1,268.9 1,176.4				Permanent	Expendable	Total	Total
New endowments received 1		University		£m	£m	£m	£m
Income receivable from endowment asset investments 0.8 1.2 2.0 6.4 Transfers (0.1) 0.1 Expenditure (31.8) (9.9) (41.7) (38.8) Valuation gains on investments 159.1 30.6 189.7 96.0 Balance as at 31 July 1,196.3 253.0 1,449.3 1,268.9 Capital 1,036.2 226.8 1,263.0 1,06.4 Unspent income 160.1 26.2 186.3 162.5 Balance as at 31 July 1,196.3 253.0 1,449.3 1,268.9 Table 1		Balance as at 1 August		1,040.2	228.7	1,268.9	1,176.4
Transfers (0.1) (0.1) (-1)		New endowments received		28.1	2.3	30.4	28.9
Expenditure (31.8) (9.9) (41.7) (38.8) Valuation gains on investments 159.1 30.6 189.7 96.0		Income receivable from endowment asset investmen	nts	0.8	1.2	2.0	6.4
Valuation gains on investments 159.1 30.6 189.7 96.0 Balance as at 31 July 1,196.3 253.0 1,449.3 1,268.9 Capital Unspent income 160.1 26.2 186.3 162.5 Balance as at 31 July 1,196.3 253.0 1,449.3 1,268.9 Unspent capital grants as at 3 July Unspent capital grants grants donations grants donations and grants recognised in the year long from from from from from from from from		Transfers		(0.1)	0.1	_	_
Balance as at 31 July		Expenditure		(31.8)	(9.9)	(41.7)	(38.8)
Capital Unspent income		Valuation gains on investments		159.1	30.6	189.7	96.0
Unspent income 160.1 26.2 186.3 162.5 1,196.3 253.0 1,449.3 1,268.9 1,196.3 253.0 1,449.3 1,268.9 1,196.3 253.0 1,449.3 1,268.9 318.5 1,196.3 253.0 1,449.3 1,268.9 318.5 1,196.3 253.0 1,449.3 1,268.9 318.5 1,196.3 253.0 1,449.3 1,268.9 318.5 318.5 318.5 318.5 318.5 318.5 318.5 318.5 318.5 318.5 318.		Balance as at 31 July		1,196.3	253.0	1,449.3	1,268.9
Balance as at 31 July 1,196.3 253.0 1,449.3 1,268.9		Capital		1,036.2	226.8	1,263.0	1,106.4
Unspent Unspent Capital research Specific 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018		Unspent income		160.1	26.2	186.3	162.5
Group Unspent capital research grants Specific grants 2017 br 2016 br Balance as at 1 August Donations and grants recognised in the year Investment income 22.9 20.7 35.6 79.2 81.9 20.7 20.6 87.5 20.2 81.9 20.7 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20		Balance as at 31 July		1,196.3	253.0	1,449.3	1,268.9
Group Unspent capital research grants Specific grants 2017 br 2016 br Balance as at 1 August Donations and grants recognised in the year Investment income 22.9 20.7 35.6 79.2 81.9 20.7 20.6 87.5 20.2 81.9 20.7 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20.2 81.9 20.7 20.2 81.9 20							
Group Capital grants research grants Specific donations 2017 Total Total Total Total Fm Balance as at 1 August 22.9 20.7 35.6 79.2 81.9 Donations and grants recognised in the year Investment income 22.9 20.7 35.6 79.2 81.9 Investment income - - 0.2 0.2 0.1 Expenditure - (7.0) (19.0) (26.0) (23.0) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year Investment income - - 0.1 0.1 0.1 Investment income - - - 0.1 0.1 0.1 Expenditure - <	31	Restricted reserves					
Group Balance as at 1 August Investment income 22.9 20.7 35.6 79.2 81.9 Expenditure - - 0.2 0.2 0.1 Expenditure - - - 0.2 0.2 0.1 Capital grants spent (43.2) - - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year Investment income - - 0.1 0.1 0.1 Expenditure - - 0.1 0.1 0.1 0.1 0.1 Expenditure - - - 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 </td <td></td> <td></td> <td>Unspent</td> <td>Unspent</td> <td></td> <td></td> <td></td>			Unspent	Unspent			
Group £m			capital	research	Specific	2017	2016
Group Balance as at 1 August 22.9 20.7 35.6 79.2 81.9 Donations and grants recognised in the year 38.4 7.6 26.6 72.6 87.5 Investment income - - 0.2 0.2 0.1 Expenditure - (7.0) (19.0) (26.0) (23.0) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) - - (43.2) - - - <td></td> <td></td> <td>grants</td> <td>grants</td> <td>donations</td> <td>Total</td> <td>Total</td>			grants	grants	donations	Total	Total
Balance as at 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent University Balance as at 1 August Donations and grants recognised in the year Balance as at 31 July Balance as at 1 August Donations and grants recognised in the year Balance as at 1 August Donations and grants recognised in the year Investment income Capital grants spent Capital grants spent Capital grants			£m	£m	£m	£m	£m
Donations and grants recognised in the year 38.4 7.6 26.6 72.6 87.5 Investment income - - 0.2 0.2 0.1 Expenditure - (7.0) (19.0) (26.0) (23.0) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.1		Group					
Investment income		Balance as at 1 August	22.9	20.7	35.6	79.2	81.9
Expenditure - (7.0) (19.0) (26.0) (23.0) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.1		Donations and grants recognised in the year	38.4	7.6	26.6	72.6	87.5
Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - 2.7 2.7 1.1		Investment income	_	_	0.2	0.2	0.1
Valuation gains on investments - - 2.7 2.7 1.2 Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - 2.7 2.7 1.1		Expenditure	_	(7.0)	(19.0)	(26.0)	(23.0)
Balance as at 31 July 18.1 21.3 46.1 85.5 79.2 University Balance as at 1 August 22.9 20.7 34.9 78.5 81.5 Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) (43.2) (68.5) Valuation gains on investments - 2.7 2.7 1.1		Capital grants spent	(43.2)	_	_	(43.2)	(68.5)
University Balance as at 1 August Donations and grants recognised in the year Investment income 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent Valuation gains on investments - 2.7 2.7 1.1		Valuation gains on investments	_	_	2.7	2.7	1.2
Balance as at 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments 22.9 20.7 34.9 78.5 81.5 81.5 81.5 64.0 80.1 0.1 0.1 0.1 0.1 0.1 0.1		Balance as at 31 July	18.1	21.3	46.1	85.5	79.2
Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.1		University					
Donations and grants recognised in the year 38.4 7.6 18.0 64.0 80.1 Investment income - - 0.1 0.1 0.1 Expenditure - (7.0) (10.8) (17.8) (15.8) Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.1		Balance as at 1 August	22.9	20.7	34.9	78.5	81.5
Investment income		_	38.4	7.6	18.0	64.0	80.1
Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.1			_	_	0.1	0.1	
Capital grants spent (43.2) - - (43.2) (68.5) Valuation gains on investments - - 2.7 2.7 1.1		Expenditure	_	(7.0)	(10.8)	(17.8)	(15.8)
Valuation gains on investments – – 2.7 2.7 1.1		•	(43.2)	_	_	(43.2)	
Balance as at 31 July 18.1 21.3 44.9 84.3 78.5			-	_	2.7	2.7	1.1
		Balance as at 31 July	18.1	21.3	44.9	84.3	78.5

32 Non-controlling interests

Non-controlling interests represent the interests of minority shareholders in the total comprehensive income and net assets of subsidary companies where the University holds less than 100% of the issued share capital (see note 35). The movement in non-controlling interests in the statement of total comprehensive income and restricted reserves of the Group were as follows:

	2017	2016
	Group	Group
	£m	£m
Opening balance as at 1 August	0.9	0.8
Total comprehensive income attributable to non-controlling interests	0.4	0.3
Acquisition of non-controlling interest	(0.5)	-
Dividends paid to non-controlling interests	(0.3)	(0.2)
Closing balance as at 31 July	0.5	0.9

During the year Cambridge University Press acquired the remaining 40% share of its non-controlling interest in Cambridge Learning Limited.

For the year ended 31 July 2017, the total comprehensive income attributable to non-controlling interests was £0.4m (2016: £0.3m) and the unrestricted reserves attributable to non-controlling interests was £0.5m (2016: £0.9m).

33	Capital commitments and contingent liabilities	2017	2016
		Group	Group
		£m	£m
	Commitments for capital expenditure:		
	Commitments contracted at 31 July	336.1	465.1
		22.4	175.4
	Authorised but not contracted at 31 July	23.1	175.4
	Commitments for capital calls on investments:	417.9	357.4
	Communicities for capital cans of investments.	417.9	337.4

The Group operates across a variety of different geographical locations with activities which are subject to local tax and regulatory compliance requirements. Currently the Group is subject to a review by overseas tax authorities the outcome of which cannot readily be foreseen and which is not considered likely to result in a material adverse impact to the financial position of the Group. At this stage no reliable estimate of the impact, if any, on the Group can be made.

34 Pension schemes

The two principal pension schemes for the University's staff are the Universities Superannuation Scheme (USS) and the Cambridge University Assistants' Contributory Pension Scheme (CPS). The USS and the CPS are not closed, nor is the age profile of their active membership rising significantly.

Cambridge University Press operates two pension schemes for its UK staff, the Press Contributory Pension Fund (PCPF) and the Press Senior Staff Pension Scheme (PSSPS). The PCPF and the PSSPS have been closed to new members.

The assets of the schemes are held in separate trustee-administered funds. The schemes are defined benefit schemes, with the exception of USS which is a hybrid pension scheme effective from 1 October 2016, and are each valued every three years using the projected unit method by professionally qualified actuaries, the rates of contribution payable being determined by the trustees on the advice of the actuaries.

Universities Superannuation Scheme (USS)

The University participates in the Universities Superannuation Scheme. With effect from 1 October 2016, the scheme changed from a defined benefit only pension scheme to a hybrid pension scheme, providing defined benefits (for all members), as well as defined contribution benefits. Because of the mutual nature of the scheme, the scheme's assets are not attributed to individual institutions and a scheme-wide contribution rate is set. The University is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. As required by section 28 of FRS 102 'Employee Benefits', the University therefore accounts for the scheme as if it were a defined contribution scheme.

The latest triennial actuarial valuation of the scheme was at 31 March 2014.

The 2014 valuation 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 to have sufficient and appropriate assets to cover their technical provisions. At 31 March 2014, the value of the assets of the scheme was £41,605m and the value of the scheme's technical provisions was £46,900m indicating a deficit of £5,295m. The assets therefore were sufficient to cover 89% of the benefits which had accrued to members after allowing for expected future increases in earnings.

The scheme's trustees have determined a recovery plan to pay off the shortfall shown by the 31 March 2014 valuation by 31 March 2031; under the recovery plan the University's contribution rate increased from 16% to 18% of pensionable pay with effect from 1 April 2016. The contribution rate will be reviewed as part of each triennial valuation and may be reviewed more frequently.

The recovery plan determines how each employer within the scheme will fund the shortfall shown by the 2014 valuation. The University recognises a liability for the present value of estimated deficit contributions payable in future periods under the recovery plan (see note 28).

The amount included in staff costs represents contributions payable to the scheme in respect of the accounting period, adjusted in respect of movements in the estimate of future deficit contributions payable.

Cambridge University Assistants' Contributory Pension Scheme (CPS)

The CPS was established under the authority of the Universities of Oxford and Cambridge Act 1923. It is a registered pension scheme for the purposes of the Finance Act 2004. The active members of the scheme are employees of the University and its subsidiary undertakings.

Triennial valuation of the scheme

A full triennial valuation of the scheme was carried out by the actuary for the trustees of the scheme for funding purposes as at 31 July 2015. The results showed the actuarial value of the scheme's assets as £551m. These were insufficient to cover the scheme's past service liabilities of £612m; the scheme had a deficit of £61m and was 90% funded.

Cambridge University Assistants' Contributory Pension Scheme (CPS) (continued)

Triennial valuation of the scheme (continued)

Since 1 August 2013 employer contributions have been set at 11.5% of pensionable pay for existing members at 31 December 2012 and 5.8% of pensionable pay (together with contributions at 5.0% to a separate defined contribution arrangement) for new entrants from 1 January 2013. In addition fixed employer contributions totalling £14.6m per annum are payable over the period from 1 August 2011 to 31 January 2019. These payments are subject to review following the next funding valuation, due as at 31 July 2018.

CPS: Pension costs under FRS 102

The liabilities of the plan have been calculated for the purposes of FRS102 based on the calculations previously undertaken for the funding actuarial valuation as at 31 July 2015, allowing for the different assumptions required under FRS102 and taking fully into consideration changes in the plan benefit structure and membership since that date. The principal assumptions used by the actuary were:

	2017	2016
Discount rate	2.55%	2.40%
Rate of increase in salaries	4.10%	3.60%
Rate of increase in pensions in deferment	3.35%	2.85%
Rate of increase in pensions in payment	3.35%	2.85%
Mortality - equivalent life expectancy for members reaching the age of 65:		
Males currently aged 65	86	86
Males currently aged 45	88	88
Females currently aged 65	89	90
Females currently aged 45	91	91

The following results were measured in accordance with the requirements of FRS 102, based on the assumptions summarised above:

	Present value o		Fair value of scheme assets		Net liability red	
	2017	2016	2017	2016	2017	2016
	£m	£m	£m	£m	£m	£m
Opening	(1,081.9)	(901.9)	576.9	551.4	(505.0)	(350.5)
Current service cost	(31.4)	(24.5)	_	_	(31.4)	(24.5)
Administrative expenses paid	-	(=)	(1.0)	(0.5)	(1.0)	(0.5)
Employer contributions	_	_	28.2	28.1	28.2	28.1
Contributions by members	(0.6)	(0.6)	0.6	0.6	_	_
Benefits paid	21.7	21.6	(21.7)	(21.6)	_	_
Interest income / (expense)	(26.1)	(32.1)	13.9	19.7	(12.2)	(12.4)
Remeasurement gains / (losses):	. ,	, ,				, ,
Actuarial losses	(64.1)	(144.4)	_	_	(64.1)	(144.4)
Expected less actual plan expenses	_	_	(0.1)	(0.5)	(0.1)	(0.5)
Return on assets excluding interest	_	_	63.2	(0.3)	63.2	(0.3)
Closing defined benefit obligation	(1,182.4)	(1,081.9)	660.0	576.9	(522.4)	(505.0)
The movement for the year in the net pension The total cost recognised in expenditure was (:	·	ctea in not	e 28.			
Current service cost	Em):				31.4	24.5
Administrative expenses					1.0	0.5
Interest cost					12.2	12.4
					44.6	37.4
				6.1		
The fair values of the major categories of scher	ne assets expr	essed as a p	ercentag	e of the		72 50/
Equities and hedge funds Bonds and cash					70.6%	73.5%
					19.4%	15.9%
Property					10.0%	10.6%
					100.0%	100.0%
The return on the scheme's assets was (£m):						
Interest income					13.9	19.7
Return on assets excluding interest inco	ome				63.2	(0.3)
					77.1	19.4

Cambridge University Press UK defined benefit schemes (PCPF and PSSPS)

Triennial valuation of the schemes

Full triennial valuations of the schemes were carried out by the actuary for the trustees of the schemes for funding purposes as at 1 January 2016.

Pension costs under FRS 102

For accounting purposes the schemes' assets are measured at fair value and liabilities are valued using the attained age method and discounted using the gross redemption yield for corporate AA rated bonds. The valuations use market-based assumptions and asset valuations, and represent current valuations. They do not impact on the joint contribution rates set by the trustees of the schemes. The actuary has updated the 1 January 2016 valuation to 31 July 2017 for the purposes of these financial statements. The principal assumptions used by the actuary for both schemes were:

	2017	2016
Discount rate	2.55%	2.40%
Rate of increase in salaries - schemes are now on frozen current salary basis	0.00%	0.00%
Rate of increase in pensions in deferment	3.55%	3.35%
Rate of increase in pensions in payment	3.55%	3.35%
Mortality - equivalent life expectancy for members at age 60:		
Males	87	87
Females	89	89

The following results were measured in accordance with the requirements of FRS 102, based on the assumptions summarised above. The results for the two schemes have been amalgamated.

	Present value of defined benefit obligation		Fair value of scheme assets		Net liability recognised in the balance sheet	
	2017	2016	2017	2016	2017	2016
	£m	£m	£m	£m	£m	£m
Opening	(344.5)	(299.0)	225.2	214.2	(119.3)	(84.8)
Current service cost	(1.8)	(1.9)	_	_	(1.8)	(1.9)
Employer contributions	_	_	5.3	6.1	5.3	6.1
Contributions by members	(0.1)	(0.2)	0.1	0.2	_	_
Benefits paid	11.1	11.0	(11.1)	(11.0)	_	_
Interest income / (expense)	(8.2)	(10.4)	5.3	7.5	(2.9)	(2.9)
Remeasurement gains / (losses):						
Actuarial gains / (losses)	6.7	(44.0)	17.1	8.2	23.8	(35.8)
Closing defined benefit obligation	(336.8)	(344.5)	241.9	225.2	(94.9)	(119.3)

The movement for the year in the net pension liability is reflected in note 28.

	2017	2016
The total cost recognised in expenditure was (£m):		
Current service cost	1.8	1.9
Interest cost	2.9	2.9
	4.7	4.8

The fair values of the major categories of scheme assets expressed as a percentage of the total were:

Equities	39.1%	37.8%
Gilts	19.5%	20.7%
Property	6.7%	6.8%
Cash and annuities	0.6%	0.7%
Diversified growth fund	34.1%	34.0%
	100.0%	100.0%
The return on the scheme's assets was (£m):		
Interest income	5.3	7.5

The University also has a smaller number of staff in other pension schemes, including the National Health Service Pension Scheme (NHSPS). Further disclosures are not given as the balances and movements are not material.

The total group pension cost for the year (see note 13) was:

	Employer contributions	Provisions (note 28)	Total	Employer contributions	Provisions (note 28)	Total
	2017	2017	2017	2016	2016	2016
	£m	£m	£m	£m	£m	£m
USS	95.0	(9.5)	85.5	86.7	13.0	99.7
CPS	29.5	4.2	33.7	28.1	(3.1)	25.0
PCPF	2.4	(0.8)	1.6	2.7	(1.0)	1.7
PSSPS	2.8	(2.6)	0.2	3.4	(3.2)	0.2
NHSPS	2.3	_	2.3	2.2	_	2.2
Other pension schemes	7.5	0.1	7.6	3.0	_	3.0
	139.5	(8.6)	130.9	126.1	5.7	131.8

35 Principal subsidiary and associated undertakings and other significant investments

The following undertakings were subsidiary undertakings during the year ended 31 July 2017. Except where stated, the accounting reference date is 31 July and the undertaking is a wholly-owned company registered in England and Wales.

Name	Notes	Principal activity
Cambridge Centre for Advanced Research and Education in Singapore Limited	a	Research and development
Cambridge Enterprise Limited		Consultancy and commercial exploitation of intellectual property
IFM Education and Consultancy Services Limited		Consultancy and commercial exploitation of intellectual property
Cambridge Investment Limited		Land development
Cambridge Investment Management Limited		Investment management
Cambridge Sustainability Ltd		Sustainability leadership programmes
Cambridge Institute for Sustainability Leadership (Australia)	b	Sustainability leadership programmes
Cambridge Institute for Sustainability Leadership (South Africa) NPC	С	Sustainability leadership programmes
Cambridge Institute for Sustainability Leadership (Belgium)	d	Sustainability leadership programmes
Cambridge University Technical Services Limited		Consultancy and commercial exploitation of intellectual property
The Dennis S Avery and Sally Tsui Wong-Avery Endowment Trust	е	Advancement of education and research in cosmology at the University
Fitzwilliam Museum (Enterprises) Limited		Publication of fine art books and sale of museum merchandise
JBS Executive Education Limited		Corporate education services
Lynxvale Limited		Construction and development services
University of Cambridge Dental Practice Limited	f	Dental services
UTS Cambridge		Primary school education
Cambridge ClassServer LLP	g	Development and commercialisation of digital educational material for China
English Language iTutoring Limited	h	Commercialisation of provision of automated tutoring and assessment in learning of English as a foreign language
Portal Estate Management		Management and maintenance of the North West Cambridge estate
Core Sustainable Heat Management Limited		North West Cambridge estate hot water and heating services
Lodge Property Services Ltd		North West Cambridge estate letting and accommodation services
Storeys Field Community Trust	i	Operational management services for the North West Cambridge estate community centre

35 Principal subsidiary and associated undertakings and other significant investments (continued)

Name	Notes	Principal activity
Associated Trusts	е	Provision of scholarships, grants and other support for the education of overseas students in the University
Cambridge Commonwealth, European and International Trust		
Gates Cambridge Trust		
Malaysian Commonwealth Studies Centre in Cambridge		
Cambridge Assessment subsidiary undertakings		
Cambridge Assessment Overseas Limited		Overseas office services
Cambridge Assessment Singapore	j	Overseas office services
Cambridge Avaliacao Representacao e Promocao Ltda	a k	Overseas office services
Cambridge Consulting (Beijing) Co. Ltd	I	Overseas office services
Cambridge Assessment Inc	m	Overseas office services
Cambridge English (Aus)	n	Examination services
Cambridge Boxhill Language Pty Limited	n	Examination services
Cambridge Michigan Language Assessment LLC (USA)	0	Examination services
Cambridge Assessment India Private Limited	р	Overseas office services
Cambridge Assessment Pakistan Private Limited	q	Overseas office services
Fundacion UCLES	r	Overseas office services
Oxford and Cambridge International Assessment		
Services Limited		Overseas office services
The West Midlands Examinations Board		Examination services
Oxford Cambridge and RSA Examinations	е	Examination services
Cambridge University Press subsidiary undertakings	S	
Academic Journal Publishing Pty Limited	n	Intermediate holding company
Australian Academic Press Pty Limited	n	Non-trading
Cambridge Daigaku Shuppan KK	t	Sales support office for the Japanese market
Cambridge Knowledge (China) Limited	u	Sales support office for the Chinese market
Cambridge University Press (Greece) MEPE	V	Sales support office for the Greek, Cypriot and Mediterranean market
Cambridge University Press (Holdings) Limited		Multi-activity holding company
Cambridge University Press India Private Limited	p	Academic and educational book publisher & distributor for India
Cambridge University Press Nigeria Limited	W	Educational book publisher & distributor for Nigeria
Cambridge University Press Operations Limited		Publishing services company
Cambridge University Press Satış ve Dağıtım		
Ticaret Limited Şirketi	Х	Distribution company for Turkey
Cambridge University Press Turkey Satış Destek Limited Sirketi	Х	Representative office
Cambridge University Press South Africa		
Proprietary Limited	у	Academic and educational book publisher & distributor for South Africa

35 Principal subsidiary and associated undertakings and other significant investments (continued)

Cambridge University Press subsidiary undertakings (continued)

Name	Notes	Principal activity
Cambridge Learning Limited		Non-trading
Editorial Edicambridge Cia Ltda	Z	Sales support office for the Ecuadorian market
Digital Services Cambridge Limited		Software development, infrastructure and business services
ELT Trading SA de CV	aa	Distribution company (Mexico and Latin America)
HOTmaths Pty Limited	ab	Development and commercialisation of web-based maths digital learning management systems
United Publishers Services Limited	u	Non-trading
Oncoweb Limited		Non-trading intermediate holding company
Cambridge-Obeikan Company Limited	ac	Academic and educational book distributor

- a Cambridge Centre for Advanced Research and Education in Singapore Limited is incorporated in Singapore and has an accounting reference date of 31 March for commercial reasons. The effect of this is not material to the consolidated accounts.
- b Cambridge Institute for Sustainability Leadership (Australia) is incorporated in Australia and has an accounting reference date of 30 June for commercial reasons. The effect of this is not material to the consolidated accounts.
- c Cambridge Institute for Sustainability Leadership (South Africa) is incorporated in South Africa.
- d Cambridge Institute for Sustainability Leadership (Belgium) is incorporated in Belgium.
- e These entities are exempt charities established by trust deeds (see note 36).
- f The University of Cambridge Dental Practice Limited was disposed of on 22 December 2016.
- g Cambridge ClassServer LLP is a limited liability partnership registered in England and Wales, in which the University has a two thirds interest acting through Cambridge Assessment and Cambridge University Press.
- h English Language iTutoring Limited is a limited company registered in England and Wales, in which the University has a 50% interest acting through Cambridge Assessment and Cambridge University Press.
- i Joint venture arrangement between the University and Cambridge City Council, with the University holding a 50% interest in the company which is limited by guarantee and registered in England and Wales.
- j Cambridge Assessment Singapore is incorporated in Singapore.
- k Cambridge Avaliacao Representacao e Promocao Ltda is incorporated in Brazil.
- I Cambridge Consulting (Beijing) Co. Ltd is incorporated in China.
- m Cambridge Assessment Inc is a United States non-stock non-profit corporation.
- n Cambridge English (Aus), Cambridge Boxhill Language Pty Limited, Academic Journal Publishing Pty Limited and Australian Academic Press Pty Limited are incorporated in Australia.
- o Cambridge Michigan Language Assessment LLC (USA) is 65% owned by Cambridge Assessment Inc and is incorporated in the United States.
- p Cambridge Assessment India Private Limited and Cambridge University Press India Private Limited are incorporated in India.
- q Cambridge Assessment Pakistan Private Limited is incorporated in Pakistan.
- r Fundacion UCLES is incorporated in Spain.
- s Cambridge University Press subsidiary undertakings have an accounting reference date of 30 April for commercial reasons, with the exceptions of the companies incorporated in India (31 March) and Mexico (31 December).
- t Cambridge Daigaku Shuppan KK is incoporated in Japan.
- u Cambridge Knowledge (China) Limited and United Publishers Services Limited are incorporated in Hong Kong.
- v Cambridge University Press (Greece) MEPE is incorporated in Greece.
- w Cambridge University Press Nigeria Limited is incorporated in Nigeria.
- x Cambridge University Press Satış ve Dağıtım Ticaret Limited Şirketi and Cambridge University Press Turkey Satis Destek Limited Sirket are incorporated in Turkey.
- y Cambridge University Press South Africa Proprietary Limited is a 75% subsidiary incorporated in South Africa.
- z Editorial Edicambridge Cia Ltda is incorporated in Ecuador.
- aa ELT Trading SA de CV is incorporated in Mexico.
- ab HOTmaths Pty Limited is a 55% subsidiary incorporated in Australia.
- ac Cambridge-Obeikan Company Limited is incorporated in Saudi Arabia.

35 Principal subsidiary and associated undertakings and other significant investments (continued)

Other significant investments

The University has interests in a number of spin-out companies formed to exploit intellectual property rights or inventions. These are included at valuation in non-current asset investments (see note 21). In some cases the University's interest amounted to 20% or more of the share capital at the year end, and these companies are listed below. As the University does not exercise a significant influence over these investments and they are not intended to be held for the long-term, they are not accounted for as associated undertakings. Other undertakings where the University's investment amounts to 20% or more are also listed below. These are not accounted for as associated undertakings as the effect on the financial statements would not be material.

Name	% interest	t Principal Activity
Ampika Limited	40	Commercial exploitation of intellectual property
Cambridge in America	22	Fundraising
Morphogen-IX Limited	26	Commercial exploitation of intellectual property
Polypharmakos	27	Commercial exploitation of intellectual property
Predictimmune	24	Commercial exploitation of intellectual property
ROADMap Systems Limted	35	Commercial exploitation of intellectual property

In addition, at the year end the University held an interest of 33.5% in Cambridge Innovation Capital plc as part of its investment portfolio. Movements in the carrying value of this investment are included in the consolidated surplus for the year.

36 Related party transactions

Due to the nature of the University's operations and the composition of its Council, it is inevitable that the University will enter into transactions in the normal course of business with Colleges, NHS Trusts, Research Councils, other grant-awarding bodies, and other private and public sector organisations in which members of the Council may have an interest. All transactions involving organisations in which members of Council may have such an interest, including those summarised below, are conducted in accordance with the University's financial regulations and usual procurement procedures. A register of the interests of the members of the Council is maintained.

The financial statements of the University include transactions with:

- (a) entities over which a member of Council or of key management personnel (see note 13) has control or joint control;
- (b) entities over which a member of Council has significant influence; and
- (c) entities of which a member of Council is a member of the key management personnel.

Such transactions are summarised below where they are considered material to the University's financial statements and / or to the other party. The University has taken advantage of the exemption within FRS 102 and has not disclosed transactions with other group entities where it holds 100% of the voting rights.

Transactions with Colleges are summarised in note 37 below. Included within the financial statements are other transactions with the following related parties:

Africa's Voices Foundation Limited

Africa's Voices Foundation Limited is a charitable social service research foundation based on applied research at the University of Cambridge that includes a member of the University Council as a trustee. In the year ended 31 July 2017, the University made payments of £88,000 to Africa's Voices Foundation Limited.

36 Related party transactions (continued)

Cambridge University Hospitals NHS Foundation Trust

Cambridge University Hospitals NHS Foundation Trust (the 'Tust'), comprising Addenbrooke's and the Rosie hospitals, is owned by a membership of patients, public and staff who are represented by a council of governors which includes a member of the University Council. Research grants and contracts income for the year ended 31 July 2017 includes £23.1m in respect of continuing grants funded by the Trust, and £17.1m was invoiced to the Trust in respect of other services, principally salary recharges. The University made payments to the Trust totalling £9.7m in the year ended 31 July 2017. Balances with the Trust at the year end were trade debtors £3.8m, trade creditors £1.2m and net research invoiced in advance and treated as a creditor £2.3m.

Cambridge University Students Union

One of the student members on the University Council held a part time executive position in the Student Union for the 2016-17 financial year. Under Statutes and Ordinances, Chapter II, the University has discretion to provide financial assistance to the Union and, in the year ended 31 July 2017, provided a grant of £274,000 and made other payments totalling £19,000 for services provided. The Union made payments to the University totalling £14,000 for temporary staff, network and other services provided.

Cancer Research UK

The Vice-Chancellor was appointed as Chairman of Cancer Research UK during 2016-17. Research grants and contracts income for the year ended 31 July 2017 includes £38.5m in respect of continuing grants funded by Cancer Research UK, and £22,000 was invoiced in respect of other services, principally connected to the Cambridge Research Institute. Balances with the charity at the year end were trade debtors £10,000 and net research invoiced in advance and treated as a creditor £10.7m.

Gatsby Charitable Foundation

Lord Sainsbury of Turville, who was elected as Chancellor of the University in October 2011, is settlor of the Gatsby Charitable Foundation (Gatsby) and, together with the Gatsby Trustees, is actively involved in setting the Foundation's strategic direction and approving its activities. In 2006 the University approved a proposal to establish a Sainsbury Laboratory for plant science in Cambridge, with Gatsby providing capital funding and research funds over a ten year period. The Sainsbury Laboratory was completed in the year ended 31 July 2011, with Gatsby capital contributions totalling £74m. Research grants and contracts income for the year ended 31 July 2017 includes £8.6m in respect of continuing grants funded by Gatsby of which £2.4m was included in creditors at the year end.

Higher Education Funding Council for England

The Higher Education Funding Council for England (HEFCE) allocates funding from the Government to universities and colleges in England. HEFCE is led by the HEFCE Board that includes a member of the University's Council. Funding received from HEFCE is included in funding body grants (see note 6) in accordance with the University's accounting policies. At 31 July 2017 current liabilities included £9.7m in respect of funding received from HEFCE but not yet recognised as income.

36 Related party transactions (continued)

Kidney Research UK

Kidney Research UK is a registered charity governed by a Board of Trustees that includes a member of the University's Council. Research grants and contracts income for the year ended 31 July 2017 includes £218,000 in respect of grants funded by Kidney Research UK, of which £147,000 was included in debtors at the year end.

PervasID Limited

PervasID Limited is a private limited company spun out from research activity in the Department of Engineering that includes a member of the University's Council as a Director. In the year ended 31 July 2017, the University made payments of £200,000 to PervasID Limited.

University of Cambridge Graduate Union

The President of the Graduate Union was also a member of the University's Council for the 2016-17 financial year. Under Statutes and Ordinances, Chapter II, the University has discretion to provide financial assistance to the Graduate Union and, in the year ended 31 July 2017, provided a grant of £101,000. The Union made payments to the University totalling £10,000 for network and other services provided.

37 Colleges

There are 31 Colleges, each of which is an independent corporation with its own property and income. Each College publishes its own financial statements in a form specified by the University.

During the year the University paid the Colleges sums totalling £67.3m (2016: £64.1m) under the terms of agreements between the University and the Colleges to share fee income with the Colleges in a way that recognises the relative contributions of the University and the Colleges. These payments are included as "Payments to Colleges" in note 14 above.

The University distributed third party donations to the Colleges totalling £6.9m (2016: £7.5m); these payments are not included in the consolidated statement of comprehensive income. During the year the University provided printing, network and other services to the Colleges for which the Colleges paid a total of £3.9m (2016: £3.6m), and the Colleges provided accommodation, catering and other services to the University for which the University paid a total of £13.1m (2016: £9.5m). During the year the Colleges made donations to the University totalling £5.3m (2016: £6.4m).

Current asset investments include £277.3m (2016: £176.7m) held on behalf of 14 (2016: 13) Colleges in the form of CUEF units (see note 24) and £14.9m (2016: £10.6m) held on behalf of the Isaac Newton Trust.

Colleges Fund	2017	2016
	£m	£m
Balance at 1 August	_	_
Contributions received from Colleges	4	4
Interest earned	_	-
Payments to Colleges	(4)	(4)
Balance at 31 July included in creditors	_	_

The Colleges Fund is administered by the University on behalf of the Colleges, who make all contributions to and receive all allocations from the Fund. The transactions on the Colleges Fund are not included in the statement of comprehensive income.

38 Connected charitable institutions

A number of charitable institutions are administered by or on behalf of the University and have been established for its general or special purposes. As a result, under paragraph 28 of Schedule 3 to the Charities Act 2011, these connected institutions are exempt from registration with the Charity Commission. Some of the connected institutions are included as subsidiary undertakings in these consolidated financial statements; others are not included in the consolidation since the University does not have control over their activities. The movements in the year on these charities' funds as reported in their own accounts were as follows:

	As at			Market	As at
1	August			value	31 July
	2016	Income	Expenditure	increase	2017
	£m	£m	£m	£m	£m
Consolidated (see note 35)					
Cambridge Commonwealth, European and International Trust	129.3	24.6	(24.0)	18.1	148.0
Gates Cambridge Trust	239.6	8.4	(8.0)	28.7	268.7
Malaysian Commonwealth Studies Centre in Cambridge	5.0	0.1	(1.6)	0.3	3.8
The Dennis S Avery and Sally Tsui Wong-Avery Endowment Trust	2.6	0.1	(0.1)	0.3	2.9
Oxford Cambridge and RSA Examinations	91.0	72.1	(70.1)	10.4	103.4
_	467.5	105.3	(103.8)	57.8	526.8
Fund balances are included in the consolidated balance sheet as:					
Expendable endowments	244.6				272.5
Permanent endowments	8.0				5.8
Restricted reserves	0.5				1.0
Unrestricted reserves	214.4				247.5
_	467.5			_	526.8
Not consolidated				-	
Isaac Newton Trust, established by Trinity College (see note 37)					
to promote education, learning and research in the University					
(accounts drawn up to 30 June 2017)	10.3	2.0	(5.7)	2.1	8.7
·					
University of Cambridge Veterinary School Trust, for the support			(0.0)		
of veterinary education in the University	1.6	0.4	(0.3)	0.2	1.9
One smaller scholarship trust	0.3	_	_	0.1	0.4
Registered clubs and societies:					
Cambridge Dancers Club	_	0.1	(0.1)	_	_
Cambridge University Amateur Dramatic Club	0.1	0.2	(0.2)	_	0.1
Cambridge University Boat Club	0.1	0.4	(0.3)	_	0.2
Cambridge University Eco Racing	_	0.1	(0.1)	_	_
Cambridge University Polo Club	0.2	0.1	(0.1)	_	0.2
Cambridge University Real Tennis Club	0.2	0.1	(0.1)	_	0.2
Cambridge University Rugby Union Football Club	0.7	0.3	(0.5)	_	0.5
Cambridge University Women's Boat Club Association	0.4	0.4	(0.4)	_	0.4
414 smaller clubs and societies	3.4	2.7	(2.4)		3.7
- -	17.3	6.8	(10.2)	2.4	16.3

39 Financial risk management

In the ordinary course of its activities, the University manages a variety of financial risks including credit risk, liquidity risk, currency risk and market risk. The principal risks and the University's approach to managing them are set out below. In view of the significance of the Cambridge University Endowment Fund (CUEF, see note 11), some aspects of financial risk management are considered for CUEF and non-CUEF separately.

Through the CUEF, the University invests in various categories of assets for the long term in order to achieve the CUEF's investment objective of a total return of RPI plus 5.25 per cent per annum. The CUEF is managed by the University's Investment Office on behalf of Cambridge Investment Management Limited, with the oversight of the University's Investment Board. In order to pursue its investment objective the CUEF seeks exposure to a variety of risks. This exposure could result in a reduction in the University's net assets.

a Credit risk

Credit risk is the risk that the University would incur a financial loss if a counterparty were to fail to discharge its obligations to the University.

Credit risk exposure

The University is exposed to credit risk in respect of its financial assets held with various counterparties. The following table details the maximum exposure to credit risk at 31 July:

	2017 £m	2016 £m
Interest-bearing securities	_	15.0
Derivative financial instrument asset positions	37.4	57.7
Investment cash balances	110.5	51.8
Trade debtors: invoices receivable	232.6	157.3
Other debtors	147.3	210.3
Money market investments	237.8	280.7
Cash at bank	87.0	88.1
Total financial assets exposed to credit risk	852.6	860.9

Of the above financial assets only certain trade debtors, as detailed below, were past their due date or were impaired during the year.

Trade debtors: outstanding invoices	239.8	164.0
Less: Provision for impairment of receivables	(7.2)	(6.7)
	232.6	157.3

Trade debtors that are less than three months past their due date are not considered impaired unless they are included in the specific provision. At 31 July 2017, trade debtors with carrying value of £50.9m (2016: £55.4m) were past their due date but not impaired.

	2017 £m	2016 £m
Balances against which a provision has been made	10.6	8.5
Balances not past their due date	178.3	100.1
Up to 3 months past due	34.1	40.8
3 to 6 months past due	10.4	7.4
Over 6 months past due	6.4	7.2
	239.8	164.0

a Credit risk (continued)

Movement on provision for impairment of receivables	2017 £m	2016 £m
Opening balance	6.7	7.4
Provided in year	2.1	0.5
Balances written off	(1.6)	(1.2)
Closing balance	7.2	6.7

Risk management policies and procedures

The University aims to minimise its counterparty credit risk exposure by monitoring the size of its credit exposure to, and the creditworthiness of, counterparties, including setting appropriate exposure limits and maturities. The creditworthiness and financial strength of trading customers and research sponsors is assessed at inception and on an ongoing basis. Counterparties for investment assets and bank accounts are selected based on their financial ratings, regulatory environments and specific circumstances.

In respect of the CUEF, fund managers appointed by the CUEF have responsibility for choosing reliable counterparties. Where CUEF investments are managed directly by the University, investment transactions are carried out with well established, approved brokers. Investment transactions are done on a cash against receipt or cash against delivery basis.

Term deposits and cash balances outside the CUEF are subject to authorised limits and rating criteria which are subject to annual review.

The ratings of term deposits and cash balances at 31 July were as follows:

, ,	2017	2016
Fitch credit quality rating (short / long term)	£m	£m
F1+ / AA Highest / Very High	62.5	76.5
F1+ / AA - Highest / Very High	18.8	_
F1 / A+ Highest / High	93.0	81.3
F1 / A Highest / High	112.4	146.5
F1 / A - Highest / High	1.5	_
F2 / A - Good / High	_	32.1
F2 / BBB+ Good / Good	20.0	-
F3 / BBB Fair / Good	_	25.0
Lower ratings	16.6	7.4
	324.8	368.8

b Liquidity risk

Liquidity risk is the risk that the University will encounter difficulties raising cash to meet its obligations when they fall due. Obligations are associated with financial liabilities and capital commitments.

Risk management policies and procedures

The majority of the assets held by the CUEF are investments in quoted securities and in funds that are readily realisable. For those CUEF assets which are not readily realisable (typically requiring more than six months to realise) and where the CUEF has commitments to provide additional capital to private investments held within the portfolio on short notice there is risk mitigation in place. Limits are set for the extent of outstanding capital commitments in the CUEF and there is regular monitoring of the amounts of distributions and redemptions required and the extent of unpaid capital commitments to private investments, compared to actual and potential liquidity of the CUEF. While CUEF assets are not available to fund obligations beyond those of the CUEF, there is no significant liquidity risk in relation to the CUEF itself.

Outside the CUEF, the Group monitors its exposure to liquidity risk by regularly monitoring its liabilities and commitments and holding appropriate levels of liquid assets. The Finance Committee approves the Liquidity Policy periodically. Liquidity and cash forecasts are reviewed by the Director of Finance on a quarterly basis. Cash and short-term deposits are maintained at levels sufficient to fund three months' operational and capital expenditure. Short-term deposits are placed with various terms between call and six months.

The following tables summarise the maturity of the Group's undiscounted contractual payments.

Three	Between	Between	More	
months	three months	one and	than	
or less	and one year	five years	five years	Total
£m	£m	£m	£m	£m
6.6	6.6	52.5	750.3	816.0
37.4	_	_	_	37.4
298.7	_	_	_	298.7
_	_	_	_	_
0.3	0.5	0.7	_	1.5
0.3	1.0	2.6	_	3.9
159.5	_	-	_	159.5
502.8	8.1	55.8	750.3	1,317.0
6.6	6.6	52.5	763.4	829.1
57.7	_	_	_	57.7
195.5	_	_	_	195.5
33.9	_	_	_	33.9
0.3	0.6	1.7	_	2.6
0.3	1.0	3.9	_	5.2
161.0	3.5	-	_	164.5
455.3	11.7	58.1	763.4	1,288.5
	months or less £m 6.6 37.4 298.7 - 0.3 0.3 159.5 502.8 6.6 57.7 195.5 33.9 0.3 0.3 161.0	months or less three months and one year £m £m 6.6 6.6 37.4 - 298.7 - - - 0.3 0.5 0.3 1.0 159.5 - 502.8 8.1 6.6 6.6 57.7 - 195.5 - 33.9 - 0.3 0.6 0.3 1.0 161.0 3.5	months or less three months and one year one and five years £m £m £m 6.6 6.6 52.5 37.4 - - 298.7 - - - - - 0.3 0.5 0.7 0.3 1.0 2.6 159.5 - - 502.8 8.1 55.8 6.6 6.6 52.5 57.7 - - 195.5 - - 33.9 - - 0.3 0.6 1.7 0.3 1.0 3.9 161.0 3.5 -	months or less three months and one year one and five years than five years £m £m £m £m 6.6 6.6 52.5 750.3 37.4 - - - 298.7 - - - - - - - 0.3 0.5 0.7 - 0.3 1.0 2.6 - 159.5 - - - 57.7 - - - 195.5 - - - 33.9 - - - 0.3 0.6 1.7 - 0.3 1.0 3.9 - 161.0 3.5 - - -

Capital commitments, excluded from the above analysis, are disclosed at note 33.

Market risk

Market risk is the risk of changes to the fair value of the Group's financial instruments. Market risk embodies the potential for both losses and gains and includes currency risk, interest rate risk and other price risk.

CUEF

The Investment Board advises the Council and is made up of investment professionals. The Investment Board monitors the performance of the Investment Office as well as providing advice to it. Investments in the CUEF are selected and combined with the aim of optimising the future long-term total return bearing in mind the expected future volatility of the return. The risk taken in order to meet the total return objective is managed by utilising diversification of investment strategies, of investment asset classes and of external investment managers. The CUEF operates an evolving asset allocation, in the context of a long-term direction. The proposed changes over the following twelve months are revised quarterly in discussion with the Investment Board. Within each asset class, fund managers are appointed and carry out the day-to-day investment transactions.

c (i) Currency risk

Currency risk is the risk that the value of an asset or liability will fluctuate due to changes to foreign currency exchange rates. The functional currency of the University and the presentational currency of the Group is Sterling. However, the Group has investment assets denominated in currencies other than Sterling and is impacted by fluctuations in foreign currency exchange rates.

At 31 July the CUEF had the following principal net exposures:

2017	2016
50.1%	52.7%
40.0%	30.6%
0.6%	3.6%
3.8%	4.2%
5.5%	8.9%
100.0%	100.0%
	50.1% 40.0% 0.6% 3.8% 5.5%

The currency exposure for overseas investments is based on the quotation or reporting currency of each holding, while the currency exposure for net monetary assets is based on the currency in which each asset or liability is denominated.

2016

c Market risk (continued)

c (i) Currency risk (continued)

The following table summarises the significant assets and liabilities exposed to currency risk as at 31 July 2017:

	US Dollar \$m	Euro €m	US Dollar £m	Euro £m	Other £m	Total £m
CUEF investment assets excluding currency	4					
contracts	2,235.2	129.6	1,695.5	115.9	342.1	2,153.5
CUEF forward currency contracts	(663.3)	(107.8)	(503.1)	(96.4)	(67.3)	(666.8)
Net exposure of CUEF	1,571.9	21.8	1,192.4	19.5	274.8	1,486.7
Exposures outside CUEF:						
Debtors	55.7	25.9	42.3	23.2	22.6	88.1
Cash balances	24.2	12.4	18.3	11.1	22.5	51.9
Creditors including bank and other loans	(33.6)	(6.8)	(25.5)	(6.0)	(19.2)	(50.7)
Forward currency contracts	_	(34.0)	_	(30.4)	_	(30.4)
Net exposure	1,618.2	19.3	1,227.5	17.4	300.7	1,545.6

The impact on total recognised gains for the year 2016-17 of additional 10% variations in the principal exchange rates would have been:

10% US Dollar appreciation122.710% Euro appreciation1.7

The following table summarises the significant assets and liabilities exposed to currency risk as at 31 July 2016:

	US Dollar	Euro	US Dollar	Euro	Other	Total
	\$m	€m	£m	£m	£m	£m
CUEF investment assets excluding currency						
contracts	1,311.8	138.8	840.6	98.3	360.1	1,299.0
CUEF forward currency contracts	(854.4)	(140.3)	(547.5)	(99.3)	(49.7)	(696.5)
Net exposure of CUEF	457.4	(1.5)	293.1	(1.0)	310.4	602.5
Exposures outside CUEF:						
Debtors	46.4	15.8	29.8	11.2	16.0	57.0
Cash balances	9.4	38.6	6.0	27.3	13.8	47.1
Creditors including bank and other loans	(26.1)	(3.6)	(13.7)	0.1	(15.3)	(28.9)
Forward currency contracts	_	(30.0)	_	(27.5)	_	(27.5)
Net exposure	487.1	19.3	315.2	10.1	324.9	650.2

The impact on total recognised gains for the year 2015-16 of additional 10% variations in the principal exchange rates would have been:

10% US Dollar appreciation	68.0
10% Euro appreciation	8.6

Risk management policies and procedures

Currency positions in the assets and liabilities of the CUEF are reviewed regularly by the Chief Investment Officer and the currency exposure is managed within the asset allocation strategy.

c Market risk (continued)

c (ii) Interest rate risk

Interest rate risk arises from the risk that the value of an asset or liability will fluctuate due to changes in market interest rates (ie for fixed interest rate assets or liabilities) or that future cash flows will fluctuate due to changes in interest rates (ie for floating rate assets or liabilities).

Interest rate exposure and sensitivity

As stated in the accounting policies, the University's Bond liabilities are measured at amortised cost using the effective interest rate method, rather than at fair value. The University has not invested in variable rate deposits or interest-bearing securities.

Interest rate risk is focused on the potential impact of interest rate changes on the fair value of investments in fixed interest securities.

At 31 July 2017 the University held no (2016: £15.0m) corporate and overseas government bonds with fixed interest.

Risk management policies and procedures

The University takes into account the possible effects of a change in interest rates on the fair value and cash flows of the interest-bearing financial assets and liabilities when making investment decisions. The CUEF has limited risk exposure to interest rates as there is regular monitoring of the allocations made to fixed interest investments not intended to be held to maturity and confirming there is no fixed interest borrowing.

c (iii) Other price risk

Price risk is the risk that the value of an asset or liability will fluctuate due to changes in market price (other than those arising from currency risk or interest rate risk), caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

This is a key risk for the University because of the significance of the endowments and other funds invested in the CUEF and the dependence of future plans on maintaining the value of CUEF units in real terms.

Concentration of exposure to other price risk

As the majority of the CUEF's investments are carried at fair value, all changes in market conditions will directly affect the University's net assets. The fund's asset allocation at the reporting date is shown in note 11.

Risk management policies and procedures

The CUEF measures the value of most of its investments on a monthly basis, and the remainder quarterly using market value if available (otherwise fair value). There is regular monitoring of the asset allocation to identify if the current allocation is in line with the actual and intended future allocations agreed with the Investment Board. Variations are then considered as part of the ongoing investment decisions.

40 Fair value

Debtors and current liabilities are stated in the Group balance sheet at book values which are not materially different from their fair values. The Bond liabilities are measured at amortised cost of £342.5m (2016: £342.5m, see note 27) whereas the fair value of the Bond liabilities at 31 July 2017 was £487.7m (2016: £513m) based on the last reported trade. The book values of the Group's other financial assets and long term liabilities, including pension obligations shown on the balance sheet are the same as the fair values.

40 Fair value (continued)

Fair value measurements

The following tables categorise the fair values of the Group's investment assets and liabilities based on the inputs to the valuation. Categorisation within the hierarchy has been determined on the basis of the lowest level input that is significant to the fair value measurement of the relevant asset as follows:

- Level 1: Valued using quoted prices in active markets for identical assets.
- Level 2: Valued by reference to valuation techniques using observable inputs other than quoted prices included within Level 1.
- Level 3: Valued by reference to valuation techniques using inputs that are not based on observable market data.

The valuation techniques used are described in more detail in note 4 (iii) to the accounts.

Investment assets at fair value as at 31 July 2017	£m	£m	£m
•			
CUEF: Quoted investments 863.8	1.3	_	865.1
Unquoted investments –	2,012.6	2.8	2,015.4
Derivative financial instruments asset positions 37.4	_	-	37.4
Cash in hand and at investment managers 103.9	_	_	103.9
Total CUEF assets 1,005.1	2,013.9	2.8	3,021.8
Other quoted investments 12.2	_	_	12.2
Other unquoted investments –	19.3	44.9	64.2
Investment properties –	407.1	_	407.1
Money market investments 43.5	-	_	43.5
Cash in hand and at investment managers 6.6	_	_	6.6
Total investment assets at fair value 1,067.4	2,440.3	47.7	3,555.4
Derivative financial instruments liability positions (CUEF) (37.4)	_	_	(37.4)
Total investments at fair value at 31 July 2017 1,030.0	2,440.3	47.7	3,518.0
Investment assets at fair value as at 31 July 2016			
CUEF: Quoted investments 767.1	11.6	_	778.7
Unquoted investments –	1,917.7	5.7	1,923.4
Derivative financial instruments asset positions 57.7	_	_	57.7
Cash in hand and at investment managers 51.8	_	_	51.8
Total CUEF assets 876.6	1,929.3	5.7	2,811.6
Other quoted investments 11.7	_	_	11.7
Other unquoted investments –	7.7	32.6	40.3
Investment properties –	288.0	_	288.0
Money market investments 40.6	_	_	40.6
Cash in hand and at investment managers 10.7		_	10.7
Total investment assets at fair value 939.6	2,225.0	38.3	3,202.9
Derivative financial instruments liability positions (CUEF) (57.7)	_	-	(57.7)
Total investments at fair value at 31 July 2016 881.9	2,225.0	38.3	3,145.2

40 Fair value (continued)

A reconciliation of the opening and closing balances for Level 3 assets measured at fair value is detailed in the table below:

	2017 £m	2016 £m
Fair value as at 1 August	38.3	61.6
Purchases less sales proceeds	(2.9)	(16.4)
Total gains	12.3	8.2
Transfers out of Level 3		(15.1)
Fair value as at 31 July	47.7	38.3

Unquoted investments include investments in hedge funds, private equity funds and property funds. The fair values of unquoted investments and derivative financial instruments held through pooled funds and partnerships are based on valuations of the underlying investments as supplied to the University's custodian by the administrators of those funds or partnerships. The Council considers that no reasonably foreseeable change to key assumptions in the Level 3 valuations would result in a significant change in fair value. Transfers into and out of Level 3 occur when the classification of the underlying assets and liabilities of these funds changes.



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