# NOTES TO THE ACCOUNTS

		2016 Group	2015 Group	2016 University	2015 University
1	Tuition fees and education contracts	£m	£m	£m	£m
•	Full-time home / EU students	122.0	102.0	122.0	102.0
	Full-time overseas (non-EU) students Other course fees	87.8 25.2	75.6 23.4	87.8 12.4	75.6 11.6
	Research Training Support Grants	27.8	25.1	27.8	25.1
		262.8	226.1	250.0	214.3
2	Funding body grants				
	Higher Education Funding Council for England (HEFCE) Recurrent grant: teaching	20.7	24.5	20.7	24.5
	Recurrent grant: research	120.0	124.4	120.0	124.4
	Other revenue grants	7.5	6.0	7.5	6.0
	Total revenue grants Capital grants recognised in the year	148.2 44.8	154.9 48.9	148.2 44.8	154.9 48.9
		193.0	203.8	193.0	203.8
3	Research grants and contracts				
	Research councils	161.1	125.8	161.1	125.8
	UK based charities European Commission	127.3 61.5	128.7 58.3	127.2 61.5	128.7 58.2
	UK industry UK Government	23.6 49.6	19.0 37.8	22.2 49.3	17.5 37.3
	Other bodies	45.9	42.7	41.1	41.1
		469.0	412.3	462.4	408.6
	Research and Development Expenditure Credit (RDEC) receivable before deduction of tax  RDEC is claimed from HM Revenue & Customs at a rate of 10% or 11% on qualifying research at received net of Corporation Tax (see note 13). The income recognised in the year and the previous incurred between 1 April 2013 and 31 July 2015. The University is not eligible to claim for RDEC in or after 1 August 2015.	ıs year relates to q	ualifying exp	enditure	53.7
5	Examination and assessment services				
	Examination fees	349.2	324.0	276.0	244.1
	Other examination and assessment services	42.5 391.7	43.0 367.0	35.5	302.6
		391.7	307.0	311.5	302.0
6	Donations and endowments				
	New endowments Donations of, and for the purchase of, fixed assets	30.3	9.8	28.9	9.8
	Donations of, and for the purchase of, heritage assets	9.2 3.7	15.9 1.5	9.2 3.7	15.9 1.5
	Other donations with restrictions Donations from subsidiary companies	15.0	17.7 —	8.5 5.4	10.7 10.2
	Unrestricted donations	13.0	13.2	11.6	11.8
		71.2	58.1	67.3	59.9
7	Other income				
	Other services rendered	42.4	42.7	33.6	35.3
	Health and hospital authorities Residences, catering and conferences	19.9 10.4	20.4 9.6	19.9 10.4	20.4 10.5
	Income from intellectual property	13.8	10.6	3.5	3.6
	Rental income Grants received (other than those included in notes 2 and 3 above)	10.4 5.0	8.4 3.5	10.5 4.1	8.9 3.5
	Sundry income	18.0	17.0	15.5	14.9
		119.9	112.2	97.5	97.1

8

Notes to the accounts (continued)

8	Investment income	2016 Group £m	2015 Group £m	2016 University £m	2015 University £m
	Income from non-current asset investments: Credited to individual funds as income Less distributed from long-term capital gain	91.9 (72.6)	89.6 (69.2)	75.0 (59.2)	74.1 (56.5)
	Underlying income Income from current asset investments and cash equivalents	19.3 2.0	20.4 2.5	15.8 2.1	17.6 2.5
		21.3	22.9	17.9	20.1
	Credited to:	Credited to funds as income 2016 £m	Excess over income 2016 £m	Underlying income 2016 £m	Underlying income 2015 £m
	Permanent endowment reserves Expendable endowment reserves Restricted reserves Unrestricted reserves	33.9 14.8 0.6 44.6	(29.0) (11.7) (0.5) (31.4)	4.9 3.1 0.1 13.2 21.3	6.5 2.6 0.1 13.7
	University		(12.0)	21.0	22.0
	Permanent endowment reserves Expendable endowment reserves Restricted reserves Unrestricted reserves	33.7 6.7 0.6 36.1 77.1	(28.9) (5.1) (0.5) (24.7)	4.8 1.6 0.1 11.4	6.3 1.3 0.1 12.4
		//.1	(33.2)	17.5	20.1

The University operates a unitised fund, the Cambridge University Endowment Fund (CUEF), for long-term investment in respect of individual restricted endowments and other balances, and by other group undertakings. The CUEF is managed on a total return basis and invests in asset classes some of which generate little or no income. Distributions are made to unit-holding funds 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. Investing funds receive distributions as income. In the year ended 31 July 2016, distributions by the CUEF exceeded income received in the year by the CUEF from its underlying investments by £72.6m (2015: £69.2m), the balance of the distributions being funded by drawing on long-term capital growth.

See note 30 for further information on the investments held by the CUEF.

# 9 Total income

Consolidated total income is credited to reserves as follows:

	Group yea	i enueu si s	uly 2016	Group yea	Group year ended 31 July 2013		
	Endowments	Restricted	Unrestricted	Endowments	Restricted	Unrestricted	
	£m	£m	£m	£m	£m	£m	
Tuition fees and education contracts	_	-	262.8	_	_	226.1	
Funding body grants	-	44.8	148.2	_	48.9	154.9	
Research grants and contracts	-	17.4	451.6	_	19.0	393.3	
Exceptional income: RDEC	-	_	1.3	_	_	53.7	
Examination and assessment services	-	_	391.7	_	_	367.0	
Publishing services	-	_	269.4	_	_	265.5	
Donations and endowments	30.3	20.3	20.6	9.8	35.1	13.2	
Other income	_	5.0	114.9	_	3.5	108.7	
Investment income	8.0	0.1	13.2	9.1	0.1	13.7	
	38.3	87.6	1,673.7	18.9	106.6	1,596.1	

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

	Revenue £m	Government grants £m	Non- exchange transactions £m	Revenue £m	Government grants £m	Non- exchange transactions £m
Tuition fees and education contracts	235.0	27.8	_	201.0	25.1	_
Funding body grants	_	193.0	-	_	203.8	_
Research grants and contracts	_	272.2	196.8	_	221.3	191.0
Exceptional income: RDEC	_	1.3	-	_	53.7	_
Examination and assessment services	391.7	-	-	367.0	_	_
Publishing services	269.4	-	-	265.5	_	_
Donations and endowments	_	_	71.2	_	_	58.1
Other income	96.9	5.0	18.0	91.7	3.5	17.0
Investment income	21.3	-	-	22.9	-	-
	1,014.3	499.3	286.0	948.1	507.4	266.1

Staff costs	2016 Group £m	2015 Group £m	2016 University £m	2015 University £m
Wages and salaries	572.8	552.7	529.5	511.6
Social security costs	56.9	51.4	52.6	47.1
Pension costs:  Current service cost	114.2	98.1	108.7	91.7
Change in underlying assumptions in calculating				
USS deficit recovery provision (see note 25)	17.6	62.3	17.1	59.3
Total pension costs (see note 32)	131.8	160.4	125.8	151.0
	761.5	764.5	707.9	709.7
The average number of staff employed in the year, expressed as full-time equivalents, was:	15,287	14,816		
Remuneration of the Vice-Chancellor			2016 £000	2015 £000
Salary for the year			323	294
Backdated increase in respect of the previous year		-	22	-
Total salary paid in the year Taxable benefits in kind			345 4	294 8
Total excluding employer pension contributions		-	349	302
Employer pension contributions			4	23
		•	353	325
Remuneration of other higher paid staff  Remuneration for this purpose excludes employer's pension contributions except to the extent that	t these result from	the sacrifice	of an element o	f pay.
, , , , , , , , , , , , , , , , , , , ,			2016	2015
£100,001 - £110,000			104	100
£110,001 - £120,000 £120,001 - £130,000			74 44	47 35
£130,001 - £130,000 £130,001 - £140,000			41	29
£140,001 - £150,000			35	31
£150,001 - £160,000			26	19
£160,001 - £170,000 £170,001 - £180,000			17 14	17 17
£180,001 - £190,000			7	7
£190,001 - £200,000			13	12
£200,001 - £210,000 £210,001 - £220,000			13 2	11
£220,001 - £230,000			1	_
£230,001 - £240,000			2	2
£240,001 - £250,000			3 3	3
£250,001 - £260,000 £260,001 - £270,000			3 -	3
£290,001 - £300,000			2	-
£300,001 - £310,000			2	-
£310,001 - £320,000 £320,001 - £330,000			1 1	-
£330,001 - £340,000			i	2
£350,001 - £360,000			1	1
£380,001 - £390,000 £420,001 - £430,000			1 1	2
The above statistics include additional payments to employees of the University on behalf of NHS	bodies.			
Compensation for loss of office				
Aggregate payments for compensation for loss of office paid to four members of staff earning in excess of £100,000 per annum (none in 2014-15):	g		2016 £000	2015 £000
Payments in respect of loss of office				2000
. aymene in respect of less of small			290	_
Key management personnel			290	
			1,090	

11	Analysis of consolidated expenditure by activity	Staff	Other operating		Interest	2016	2015
		costs £m	expenses £m	Depreciation £m	payable £m	Total £m	Total £m
	Academic departments	229.6	69.5	8.1	-	307.2	294.9
	Academic services	28.5	12.2 64.1	0.8	-	41.5	42.4 45.3
	Payments to Colleges (see note 35) Research grants and contracts	192.7	167.7	_ 16.8	Ξ	64.1 377.2	45.3 339.1
	Other activities:					···-	000.1
	Examination and assessment services	114.0	214.7	6.7	0.3	335.7	318.9
	Publishing services	91.5	175.0	4.0	3.9	274.4	276.6
	Other services rendered Intellectual property	11.3 3.0	27.3 6.7	0.1 -	_	38.7 9.7	38.8 6.5
	Residences, catering and conferences	3.0	11.2	_	_	14.2	12.0
	Other activities total	222.8	434.9	10.8	4.2	672.7	652.8
	Administration and central services:						
	Administration General educational	49.2 2.6	2.5 55.5	0.9 0.1	_	52.6 58.2	51.0 62.9
	Staff and student facilities	2.9	1.5	-	_	4.4	4.5
	Development office	5.7	6.9	_	_	12.6	10.3
	Other	1.4	2.6			4.0	4.7
	Administration and central services total	61.8	69.0	1.0	-	131.8	133.4
	Premises Interest payable on bond liabilities	16.2	44.7	39.6	13.2	100.5 13.2	98.4 13.2
	Pension cost adjustments for USS	13.0		_	3.3	16.3	55.7
	Pension cost adjustments for CPS (see note 32)	(3.1)	_	_	12.4	9.3	7.5
	Total per income and expenditure account	761.5	862.1	77.1	33.1	1,733.8	1,682.7
	-					.,	.,
							0045
	Other operating expenses include:					2016 Group	2015 Group
						£000	£000
	Auditors' remuneration					2000	2000
	Audit fees payable to the University's external auditors					781	770
	Other fees payable to the University's external auditors Audit fees payable to other firms				_	202 26	331 77
	Payments to trustees Reimbursement of expenses to three (2015: five) external mer	mbers of Counci	I		-	5	5
	These amounts include related irrecoverable VAT.						
12	Interest and other finance costs			2016	2015	2016	2015
				Group	Group	University	University
				£m	£m	£m	£m
	Interest payable on bond liabilities (see note 24)			13.2	13.2	13.2	13.2
	Interest on pension liabilities (see note 25)			18.8	18.9	18.7	18.9
	Interest paid on other retirement benefit liabilities (see note 26)			0.7	0.9	0.7	0.9
	Other interest payable			0.4	0.3	0.3	0.3
				33.1	33.3	32.9	33.3
13	Taxation						
	UK Corporation Tax			0.3	11.7	0.3	12.0
	Foreign taxes			2.7	0.5	1.4	0.5
				3.0	12.2	1.7	12.5

As an exempt charity, 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 of Chargeable Gains Act 1992 to the extent that such income or gains are applied to exclusively charitable purposes. The charge for UK Corporation Tax is solely in respect of Research and Development Expenditure Credit grants receivable - see note 4 above.

## 14 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

The investment fund managed by the group and holding the majority of the group's investments Cambridge University Endowment Fund (CUEF)

together with some investments of Colleges and other associated bodies (see note 30)

The combination of smaller segments including the associated trusts and subsidiary companies not included in the Assessment and Press groups Trusts and other

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.

						Eliminations	
					Trusts	and	
	HEI	Assessment	Press	CUEF	and other	adjustments	Group
	£m	£m	£m	£m	£m	£m	£m
Year ended 31 July 2016							
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
Year ended 31 July 2015							
Total income							
External	1.031.3	368.5	269.0	336.5	38.6	(322.3)	1.721.6
Intersegment	92.3	7.5	26.7	-	132.4	(258.9)	-,,,,,,,,,
•						, ,	
Total	1,123.6	376.0	295.7	336.5	171.0	(581.2)	1,721.6
Surplus for the year	281.9	66.5	20.6	336.5	39.7	(389.3)	355.9
Included in surplus for the year:							
Investment income	71.3	7.6	0.5	15.0	16.8	(88.3)	22.9
Depreciation and amortisation	(60.7)	(18.7)	(7.4)	_	(0.2)	(1.2)	(88.2)
Interest payable	(28.7)	(0.3)	(4.3)	_	_	_	(33.3)
Gain on investments	195.9	19.7	0.8	321.6	35.6	(244.4)	329.2
Additions to intangible assets, fixed assets,							
heritage assets and investment property	230.0	78.0	14.0	-	0.2	(32.9)	289.3
Assets	4,584.2	579.7	241.2	2,551.6	438.5	(2,510.5)	5,884.7
Liabilities	(1,242.8)	(120.3)	(203.9)		(73.6)		(1,642.1)
Net assets	3,341.4	459.4	37.3	2,551.6	364.9	(2,512.0)	4,242.6

# 14 Segment information (continued)

# Eliminations and adjustments

	The following eliminations and adjustments reconcile the totals of segment measu consolidated measures reported in these financial statements.	ires to the			2016 £m	2015 £m
	Total income					
	Elimination of intersegment income Exclude investment gain element of CUEF total return Exclude CUEF investment income attributable to external investors				(203.8) (220.1) (0.9)	(258.9) (321.6) (0.7)
	Total eliminations and adjustments			-	(424.8)	(581.2)
	Surplus for the year					
	Eliminate CUEF surplus recognised in other segments or attributable Eliminate transfers from other segments to HEI based on surpluses Apply group accounting policy to Press operational property: deprecia Elimination of intersegment funding commitments Eliminate intersegment surplus on transfer of fixed assets		ors		(235.6) (23.9) (1.0) (0.3) (0.6)	(336.5) (27.1) (1.1) 2.0 (26.6)
	Total eliminations and adjustments			_	(261.4)	(389.3)
	Assets and liabilities		Assets 2016 £m	Liabilities 2016 £m	Net assets 2016 £m	Net assets 2015 £m
	Eliminate CUEF assets recognised in other segments or attributable	to external invest	ors (2,564.2)	(189.7)	(2,753.9)	(2,551.6)
	Apply group accounting policy to Press operational property: net book	c value	43.0	47.0	43.0	44.0
	Eliminate accrual for intersegment funding commitments Eliminate intersegment surplus on transfers of fixed assets		(19.6)	17.3 -	17.3 (19.6)	17.7 (19.0)
	Eliminate investments in subsidiaries		(3.3)	-	(3.3)	(3.1)
	Elimate intersegment balances	_	(122.9)	122.9		_
	Total eliminations and adjustments	_	(2,667.0)	(49.5)	(2,716.5)	(2,512.0)
(	Intangible assets and goodwill  Group Cost	Software £m	Goodwill £m	Others £m	2016 Total £m	2015 Total £m
	At 1 August	159.0	15.8	9.0	183.8	151.7
	Additions	25.9	-	0.1	26.0	32.9
	Disposals Currency adjustments	(1.0) -	0.3	_	(1.0) 0.3	(0.4) (0.4)
	At 31 July	183.9	16.1	9.1	209.1	183.8
	Accumulated amortisation					
,	At 1 August	89.9	13.5	7.9	111.3	92.5
	Charge for the year	22.0	0.9	0.4	23.3	19.5
	Eliminated on disposals Currency adjustments	(1.0)	0.1	_	(1.0) 0.1	(0.5) (0.2)
,	At 31 July	110.9	14.5	8.3	133.7	111.3
ı	Net book value	73.0	1.6	0.8	75.4	72.5
(	University	Software	Goodwill	Others	2016 Total	2015 Total
		£m	£m	£m	£m	£m
(	Cost					
	At 1 August Additions	151.0	1.1	13.0	165.1	132.6
	Additions Disposals	25.7 (1.0)	_	0.1 -	25.8 (1.0)	32.7 (0.1)
	Currency adjustments		-	-	`-'	(0.1)
,	At 31 July	175.7	1.1	13.1	189.9	165.1
,	Accumulated amortisation					
	At 1 August	82.5	1.1	11.3	94.9	76.4
	Charge for the year Eliminated on disposals	21.8 (1.0)	_	0.3	22.1 (1.0)	18.6 (0.1)
	Currency adjustments		_	-	-	-
,	At 31 July	103.3	1.1	11.6	116.0	94.9
ı	Net book value	72.4	-	1.5	73.9	70.2

16	Fixed assets			Assets in		2016	2015
	Group	Land £m	Buildings £m	construction £m	Equipment £m	Total £m	Total £m
	Cost						
	At 1 August Additions Transfers	421.0 _ _	1,429.3 3.4 173.7	213.2 184.1 (174.0)	277.4 59.8 0.3	2,340.9 247.3	2,147.7 202.5
	Disposals Currency adjustments	=	(4.0) 0.1		(8.5) 0.2	(12.5) 0.3	(9.6) 0.3
	At 31 July	421.0	1,602.5	223.3	329.2	2,576.0	2,340.9
	Accumulated depreciation						
	At 1 August Charge for the year Elimination on disposals Currency adjustments	- - -	48.2 46.4 (2.5)	- - -	212.4 30.7 (8.3) 0.1	260.6 77.1 (10.8) 0.1	199.1 68.7 (7.6) 0.4
	At 31 July	_	92.1	_	234.9	327.0	260.6
	Net book value At 31 July	421.0	1,510.4	223.3	94.3	2,249.0	2,080.3
	At 1 August	421.0	1,381.1	213.2	65.0	2,080.3	1,948.6
	University	Land £m	Buildings £m	Assets in construction £m	Equipment £m	2016 Total £m	2015 Total £m
	Cost	2.111	LIII	ZIII	£III	LIII	LIII
	At 1 August Additions Transfers Disposals Currency adjustments	421.0 - - - -	1,421.0 3.2 174.9 (4.1) 0.1	214.5 184.8 (175.2) –	274.8 57.9 0.3 (7.6) 0.1	2,331.3 245.9 – (11.7) 0.2	2,138.1 202.0 - (9.0) 0.2
	At 31 July	421.0	1,595.1	224.1	325.5	2,565.7	2,331.3
	Accumulated depreciation		.,			_,-,	
	At 1 August Charge for the year Elimination on disposals Currency adjustments	-	45.6 46.2 (2.7)	- - -	211.0 30.0 (7.6) 0.1	256.6 76.2 (10.3) 0.1	195.4 68.1 (7.2) 0.3
	At 31 July	_	89.1	_	233.5	322.6	256.6
	Net book value At 31 July	421.0	1,506.0	224.1	92.0	2,243.1	2,074.7
	At 1 August	421.0	1,375.4	214.5	63.8	2,074.7	1,942.7
17	Heritage assets			2016 Group £m	2015 Group £m	2016 University £m	2015 University £m
	Opening balance Additions in the year			60.9 4.2	59.4 1.5	60.9 4.2	59.4 1.5
	Closing balance			65.1	60.9	65.1	60.9

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:	2016	2015	2014	2013	2012
	£m	£m	£m	£m	£m
Acquisitions purchased with specific donations	1.2	1.1	0.4	4.0	0.9
Value of acquisitions by donation	2.5	0.4	0.1	11.6	4.7
Total acquired by, or funded by, donations	3.7	1.5	0.5	15.6	5.6
Acquisitions purchased with University funds	0.5	-	0.5	0.7	0.3
Total acquisitions capitalised	4.2	1.5	1.0	16.3	5.9

18	Non-current asset investments	Group 2016 £m	Group 2015 £m	University 2016 £m	University 2015 £m
	Opening balance North West Cambridge: additions North West Cambridge: disposals at cost and transfers to fixed assets Other net disposals in the year Valuation gains on investments	2,688.2 141.8 (23.7) (123.7) 221.8	2,422.9 53.0 (1.0) (115.8) 329.2	2,256.1 141.8 (23.7) (114.6) 180.2	2,027.4 53.0 (1.0) (90.1) 266.8
	Closing balance	2,904.4	2,688.3	2,439.8	2,256.1
	Represented by: CUEF units (see note 30) North West Cambridge development Other property Securities Spin-out and similar companies (see note 33) Investments in subsidiary undertakings Other	2,564.2 220.6 67.4 21.4 26.3 - 4.5	2,402.4 102.5 58.5 98.7 23.5 – 2.7	2,093.6 220.6 67.4 9.8 16.3 31.4	1,958.9 102.5 57.9 88.4 15.8 32.1 0.5
		2,904.4	2,688.3	2,439.8	2,256.1

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 will be transferred to fixed assets.

19	Stocks and work in progress	Group 2016	Group 2015	University 2016	University 2015
		£m	£m	£m	£m
	Goods for resale	25.0	24.4	19.1	18.4
	Pre-publication costs and other work in progress	25.0 27.0	29.0	25.2	27.4
	Other stocks	1.3	1.5	1.3	1.4
		53.3	54.9	45.6	47.2
20	Trade and other receivables				
	Amounts due within one year				
	Research grants recoverable	100.1	85.5	100.1 39.4	85.5 34.6
	Amounts due from subsidiary undertakings Debtors re examination and assessment services	- 84.5	81.6	39.4 82.7	79.9
	Debtors re publishing and printing	99.8	88.3	78.8	67.3
	Other debtors	83.2	105.1	68.0	91.6
		367.6	360.5	369.0	358.9
21	Current asset investments				
21	CUEF units held on behalf of other entities (see note 30)	189.7	149.2	660.3	592.7
	Securities	109.7	0.4	-	0.4
	Money market investments	40.6	76.0	22.6	76.2
	Other	11.4	_	11.4	
		241.7	225.6	694.3	669.3
22	Cash and cash equivalents				
	Money market investments with maturity less than three months  Cash at bank and in hand and with investment managers	240.1 88.1	217.1 124.6	240.1 51.6	217.1 94.9
	·	328.2	341.7	291.7	312.0
			• • • • • • • • • • • • • • • • • • • •		
23	Creditors: amounts falling due within one year				
	Bank overdraft Current portion of long-term bank loan	33.9 0.9	12.1 0.8	33.9 0.9	12.0 0.8
	Finance leases	1.3	1.6	1.3	1.6
	Research grants received in advance	190.5	208.2	189.1	203.1
	Amounts due to subsidiary undertakings	. <del>.</del> .		20.0	11.0
	Creditors re examination and assessment services	81.1 94.7	76.9 91.6	59.3 84.2	56.5 82.5
	Creditors re publishing services Other creditors	94.7 194.4	169.9	84.2 165.4	82.5 151.6
	Investments and cash equivalents held on behalf of subsidiary undertakings	-	-	477.9	473.7
	Investments and cash equivalents held on behalf of Colleges and other associated bodies	195.5	151.6	195.5	151.6
		792.3	712.7	1,227.5	1,144.4

## 24 Creditors: amounts falling due after more than one year

	Group 2016 £m	Group 2015 £m	University 2016 £m	University 2015 £m
Bond liabilities	342.5	342.4	342.5	342.4
Bank loans	1.7	1.7	0.5	1.7
Finance leases	3.9	3.0	3.9	3.0
Loan from minority interest	-	1.1	_	_
Accruals and deferred income	10.6	10.9	-	
	358.7	359.1	346.9	347.1

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.

## 25 Pension liabilities

Group	CPS £m	Press £m	Defined benefit total £m	USS deficit recovery £m	Total 2016 £m	Total 2015 £m
Opening balance Movement in year:	350.5	88.9	439.4	111.1	550.5	472.9
Current service cost	25.0	1.9	26.9	_	26.9	23.8
Contributions	(28.1)	(6.1)	(34.2)	(4.6)	(38.8)	(42.8)
Interest on liability	12.4	3.1	`15.5 <sup>°</sup>	`3.3 <sup>´</sup>	`18.8 <sup>´</sup>	`18.9 <sup>´</sup>
Currency adjustments	-	0.7	0.7	-	0.7	0.2
Change in underlying assumptions	-	-	-	17.6	17.6	62.3
Actuarial loss	145.2	35.6	180.8	-	180.8	15.2
Closing balance	505.0	124.1	629.1	127.4	756.5	550.5
University						
Opening balance	350.5	88.9	439.4	105.9	545.3	470.3
Movement in year:						
Current service cost	25.0	1.9	26.9	-	26.9	23.8
Contributions	(28.1)	(6.1)		(4.4)	(38.6)	(42.4)
Interest on liability	12.4	3.1	15.5	3.2	18.7	18.9
Currency adjustments	-	0.7	0.7	-	0.7	0.2
Change in underlying assumptions	-	-	-	17.1	17.1	59.3
Actuarial loss	145.2	35.6	180.8	-	180.8	15.2
Closing balance	505.0	124.1	629.1	121.8	750.9	545.3

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 32.

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 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 1.75% (2015: 3.0%). The movements described as "change in underlying assumptions" include the impact of movements in discount rates and, for 2014-15, the impact of the revision of the deficit recovery plan in July 2014. The resulting increase in provision is included in staff costs (see note 10).

# 26 Other retirement benefits liabilities

Group and University	2016 £m	2015 £m
Opening balance	19.8	20.9
Movement attributable to the year:		
Current service cost less benefits paid	0.3	(0.1)
Contributions	(0.8)	(0.3)
Other finance cost	0.7	0.9
Currency adjustments	1.0	0.4
Actuarial loss / (gain)	1.4	(2.0)
Closing balance	22.4	19.8

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

27	Endowment reserves  Group		Permanent £m	Expendable £m	2016 Total £m	2015 Tota £m
	Balance 1 August		963.0	451.0	1,414.0	1,262.
	New endowments received		26.3	451.0	30.4	9.
	Investment income		4.9	3.1	8.0	9.
	Expenditure Valuation gains on investments		(29.5) 81.1	(20.2) 35.4	(49.7) 116.5	(38. 171.
		-		473.4		
	Balance 31 July	<del>-</del>	1,045.8		1,519.2	1,414.
	Capital Unspent income		904.6 141.2	452.5 20.9	1,357.1 162.1	1,263. 150.
	Balance 31 July		1,045.8	473.4	1,519.2	1,414.
	Representing:					
	Trust and Special Funds: Professorships, Readerships and Lectureships		524.0	67.5	591.5	530.
	Scholarships and bursaries		133.1	18.6	151.7	143.
	Other		364.4	142.2	506.6	497.
	Gates Cambridge Trust Examination Board restricted funds		_	239.6 5.5	239.6 5.5	226.
	General endowments		24.3	-	24.3	5. 10.
	Group total		1,045.8	473.4	1,519.2	1,414.
	University	_				
	Balance 1 August		959.2	217.2	1,176.4	1,046.
	New endowments received		24.8	4.1	28.9	9.8
	Income receivable from endowment asset investments Expenditure		4.8 (29.4)	1.6 (9.4)	6.4 (38.8)	7.6 (29.6
	Valuation gains on investments	<u>-</u>	80.8	15.2	96.0	142.5
	Balance 31 July	_	1,040.2	228.7	1,268.9	1,176.4
	Capital Unspent income		899.0 141.2	207.4 21.3	1,106.4 162.5	1,025.9 150.9
	Balance 31 July	_	1,040.2	228.7	1,268.9	1,176.4
28	Restricted reserves	Unspent capital	Unspent research	Specific	2016	
28	Restricted reserves			Specific donations £m	2016 Total £m	Tota
28	Restricted reserves  Group	capital grants	research grants	donations	Total	Tota
28	<b>Group</b> Balance 1 August	capital grants £m 29.5	research grants	donations £m	Total £m 81.9	Tota £n
28	Group  Balance 1 August  Donations and grants recognised in the year	capital grants £m 29.5 61.9	research grants £m 15.4 9.6	donations £m 37.0 16.0	Total £m 81.9 87.5	Tota £n 57.0 106.9
28	Group  Balance 1 August Donations and grants recognised in the year Investment income	capital grants £m 29.5 61.9	research grants £m 15.4 9.6	donations £m 37.0 16.0 0.1	Total £m 81.9 87.5 0.1	Tota £n 57.1 106.9
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure	capital grants £m 29.5 61.9 –	research grants £m 15.4 9.6	donations £m 37.0 16.0	Total £m 81.9 87.5 0.1 (23.0)	Tota £n 57.0 106.9 0.1 (22.0
28	Group  Balance 1 August Donations and grants recognised in the year Investment income	capital grants £m 29.5 61.9	research grants £m 15.4 9.6	donations £m 37.0 16.0 0.1	Total £m 81.9 87.5 0.1	Tota £n 57.0 106.9 0.1 (22.0 (61.9
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent	capital grants £m 29.5 61.9 –	research grants £m 15.4 9.6 - (4.3)	donations £m 37.0 16.0 0.1 (18.7)	Total £m 81.9 87.5 0.1 (23.0) (68.5)	Tota £n 57.0 106.9 0.0 (22.0 (61.9
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments	capital grants £m 29.5 61.9  (68.5)	research grants £m 15.4 9.6 - (4.3)	37.0 16.0 0.1 (18.7) - 1.2	Total £m 81.9 87.5 0.1 (23.0) (68.5) 1.2	57.0 106.9 0.7 (22.0 (61.9
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments Balance 31 July  University Balance 1 August	capital grants £m 29.5 61.9  (68.5)	research grants £m 15.4 9.6 - (4.3)	37.0 16.0 0.1 (18.7) - 1.2 35.6	81.9 87.5 0.1 (23.0) (68.5) 1.2 79.2	57.0 57.0 106.9 0. (22.0 (61.9 1.8
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year	capital grants £m  29.5 61.9 - (68.5) - 22.9	research grants £m  15.4 9.6 - (4.3) 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6	81.9 87.5 0.1 (23.0) (68.5) 1.2 79.2	Totel £n 57.(106.s. 106.s. 106
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income	capital grants £m  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6	Total £m  81.9 87.5 0.1 (23.0) (68.5) 1.2  79.2  81.5 80.1 0.1	Total £n 57.106.9 0.0 (22.6 (61.8 81.9 56.6
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure	capital grants £m  29.5 61.9 - (68.5) - 22.9	research grants £m  15.4 9.6 - (4.3) 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6	70tal £m  81.9 87.5 0.1 (23.0) (68.5) 1.2  79.2  81.5 80.1 0.1 (15.8)	Total £n 57.1 106.5 0 (22.6 (61.8 81.9 99.3 0 (14.8 1.9 14.8 14.8 14.8 14.8 14.8 14.8 14.8 14.8
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income	capital grants £m  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6	Total £m  81.9 87.5 0.1 (23.0) (68.5) 1.2  79.2  81.5 80.1 0.1	Total £n  57.0  60.0  (22.0  (61.9  81.0  56.0  99.0  0.1  (14.4  (61.8
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments	capital grants £m 29.5 61.9  (68.5)	rese gra	arch ants £m 5.4 9.6 - (4.3)	### Specific donations   ### ### ### ### ### ### ### ### ###	arch Specific 2016 ants donations Total £m £m £m  5.4 37.0 81.9 9.6 16.0 87.5 - 0.1 0.1 (4.3) (18.7) (23.0) (68.5) - 1.2 1.2
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent	capital grants £m  29.5 61.9 - (68.5) - 22.9  29.5 61.9 - (68.5) - (68.5)	research grants £m  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5)	70tal £m  81.9 87.5 0.1 (23.0) (68.5) 1.2  79.2  81.5 80.1 0.1 (15.8) (68.5)	
	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments	capital grants £m  29.5 61.9 — (68.5) — 22.9  29.5 61.9 — (68.5) — (68.5) — (68.5)	research grants £m  15.4 9.6 - (4.3) - 20.7  15.4 9.6 - (4.3) (4.3) (4.3) (4.3)	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5) - 1.1	81.9 87.5 0.1 (23.0) (68.5) 1.2 79.2 81.5 80.1 0.1 (15.8) (68.5) 1.1	55 1000 ( (22 (66 83 56 99 ( (11 (11 (66
	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July	capital grants £m  29.5 61.9 (68.5) 22.9  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5) - 1.1	70tal £m  81.9 87.5 0.1 (23.0) (68.5) 1.2  79.2  81.5 80.1 0.1 (15.8) (68.5) 1.1  78.5	567. 81. 81. 201 Group
	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  Non-controlling interests  The following balances and movements are included in unrestricted reserved.	capital grants £m  29.5 61.9 (68.5) 22.9  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5) - 1.1	81.9 87.5 0.1 (23.0) (68.5) 1.2 79.2 81.5 80.1 0.1 (15.8) (68.5) 1.1 78.5	Tota £r  57. 106. 0. (22. (61. 1.  81.  56. 99. 0. (14. (61. 1.  81.  201. Grou
	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  Non-controlling interests  The following balances and movements are included in unrestricted reserved.	capital grants £m  29.5 61.9 (68.5) 22.9  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5) - 1.1	81.9 87.5 0.1 (23.0) (88.5) 1.2 79.2 81.5 80.1 0.1 (15.8) (68.5) 1.1 78.5	Tota £n  57.106.6 0.0 (22.1 (61.1 81.1  56.1 99.0 0.14.4 81.1  81.1  61.2  61.2  61.3  61.3  70.0
	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  Non-controlling interests  The following balances and movements are included in unrestricted reserved.	capital grants £m  29.5 61.9 (68.5) 22.9  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5) - 1.1	81.9 87.5 0.1 (23.0) (68.5) 1.2 79.2 81.5 80.1 0.1 (15.8) (68.5) 1.1 78.5	Tota £n  57.0  106.5  0.1  (22.0  (61.5  81.9  56.6  99.3  0.1  (14.8  81.5  2015  Group £n  0.8
28	Group  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  University  Balance 1 August Donations and grants recognised in the year Investment income Expenditure Capital grants spent Valuation gains on investments  Balance 31 July  Non-controlling interests  The following balances and movements are included in unrestricted reserved.	capital grants £m  29.5 61.9 (68.5) 22.9  29.5 61.9 (68.5) 22.9	research grants £m  15.4 9.6 - (4.3) - 20.7  15.4 9.6 - (4.3) - 20.7	37.0 16.0 0.1 (18.7) - 1.2 35.6 36.6 8.6 0.1 (11.5) - 1.1	81.9 87.5 0.1 (23.0) (68.5) 1.2 79.2  81.5 80.1 0.1 (15.8) (68.5) 1.1  78.5	2015 Tota £m 57.0 0.1. (22.0 (61.5 1.8 81.9 56.6 99.3 0.1 (14.8 (61.5 1.8 81.5 Group £m 0.3 (0.3

Non-controlling interests represent the interests of minority shareholders in the net assets of subsidiary companies where the University holds less than 100% of the issued share capital (see note 33).

### 30 Cambridge University Endowment Fund (CUEF)

The University operates a unitised fund, the Cambridge University Endowment Fund (CUEF), for long-term investment in respect of individual restricted endowments and other balances. A number of subsidiary undertakings, Cambridge Colleges and other associated bodies also hold units in the CUEF. The assets of the CUEF were held in the following categories:

	31 July 2	31 July 2016		2015
	£m	%	£m	%
Public equity	1,662.1	60.3%	1,564.2	61.3%
Private investment	327.4	11.9%	237.0	9.3%
Absolute return	360.1	13.1%	345.3	13.5%
Credit	11.5	0.4%	44.6	1.8%
Real assets	305.4	11.1%	239.7	9.4%
Fixed interest / cash	87.4	3.2%	120.8	4.7%
Total value of fund	2,753.9	100.0%	2,551.6	100.0%

Public equity includes all equity stocks traded on a liquid market, together with related 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 may include unlisted equities and / or corporate credits (such as bonds, loans and other claims).

Absolute return includes investments in trading strategies which are to 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 to 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:

	Group 2016 £m	Group 2015 £m	University 2016 £m	University 2015 £m
Non-current asset investments (see note 18) Current asset investments (see note 21) - balances held on behalf of:	2,564.2	2,402.4	2,093.6	1,958.9
Subsidiary undertakings Colleges Other associated bodies	_ 176.7 13.0	- 136.9 12.3	470.6 176.7 13.0	443.5 136.9 12.3
Total included in current asset investments	189.7	149.2	660.3	592.7
Total value of units	2,753.9	2,551.6	2,753.9	2,551.6

31	Capital commitments	Group 2016 £m	Group 2015 £m
	Commitments for capital expenditure:		
	Commitments contracted at 31 July	465.1	344.5
	Authorised but not contracted at 31 July	175.4	271.9
	Commitments for capital calls on investments:	357.4	328.0

### 32 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 which 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)

Because of the mutual nature of the scheme, the scheme's assets are not hypothecated to individual institutions and a scheme-wide contribution rate is set. The University is 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 and therefore, as required by section 28 of FRS 102, 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 25).

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.

#### 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.

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.

## 32 Pension schemes (continued)

# 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:

	2016	2015
Discount rate	2.40%	3.55%
Rate of increase in salaries	3.60%	4.00%
Rate of increase in pensions in deferment	2.85%	3.25%
Rate of increase in pensions in payment	2.85%	3.25%
Mortality - equivalent life expectancy for members reaching the age of 65:		
Males currently aged 65	86	87
Males currently aged 45	88	88
Females currently aged 65	90	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:

		esent value of defined Fair value of scheme I benefit obligation assets		Net liability recognised in the balance sheet		
	2016	2015	2016	2015	2016	2015
	£m	£m	£m	£m	£m	£m
Opening	(901.9)	(848.9)	551.4	510.4	(350.5)	(338.5)
Current service cost	(25.0)	(21.5)	-	_	(25.0)	(21.5)
Employer contributions	-	_	28.1	28.2	28.1	28.2
Contributions by members	(0.6)	(0.6)	0.6	0.6	-	_
Benefits and expenses paid	22.6	21.4	(22.6)	(21.4)	-	_
Interest income / (expense)	(32.1)	(35.7)	19.7	21.6	(12.4)	(14.1)
Remeasurement gains / (losses):	. ,	, ,				, ,
Actuarial losses	(144.9)	(16.6)	_	_	(144.9)	(16.6)
Return on assets excluding interest	· - ′	· - '	(0.3)	12.0	(0.3)	12.0
Closing defined benefit obligation	(1,081.9)	(901.9)	576.9	551.4	(505.0)	(350.5)

The movement for the year in the net pension liability is reflected in note 25.

The total cost recognised in expenditure was: Current service cost Interest cost	25.0 12.4	21.5 14.1
	37.4	35.6
The fair values of the major categories of scheme assets expressed as a percentage of the total were:  Equities and hedge funds  Bonds and cash  Property	73.5% 15.9% 10.6%	73.2% 16.7% 10.1%
	100.0%	100.0%
The return on the scheme's assets was: Interest income Return on assets excluding interest income	19.7 (0.3)	21.6 12.0
	19.4	33.6

## 32 Pension schemes (continued)

# 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 2016 for the purposes of these financial statements. The principal assumptions used by the actuary for both schemes were:

	2016	2015
Discount rate	2.40%	3.55%
Rate of increase in salaries - schemes are now on frozen current salary basis	0.00%	0.00%
Rate of increase in pensions in deferment	3.35%	3.50%
Rate of increase in pensions in payment	3.35%	3.50%
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 Fair value of scheme benefit obligation assets		Net liability recognised in the balance sheet		
	2016	2015	2016	2015	2016	2015
	£m	£m	£m	£m	£m	£m
Opening	(299.0)	(273.4)	214.2	196.5	(84.8)	(76.9)
Current service cost	(1.9)	(1.9)	_	_	(1.9)	(1.9)
Employer contributions	`- `		6.1	6.0	6.1	6.0
Contributions by members	(0.2)	(0.2)	0.2	0.2	_	_
Benefits and expenses paid	11.0	11.0	(11.0)	(11.0)	_	_
Interest income / (expense)	(10.4)	(11.3)	` 7.5 <sup>°</sup>	`8.1 <sup>´</sup>	(2.9)	(3.2)
Remeasurement gains / (losses):	` ,	, ,			` ,	` ,
Actuarial (losses) / gains	(44.0)	(23.2)	8.2	14.4	(35.8)	(8.8)
Closing defined benefit obligation	(344.5)	(299.0)	225.2	214.2	(119.3)	(84.8)

The movement for the year in the net pension liability is reflected in note 25.

The total cost recognised in expenditure was:  Current service cost Interest cost	1.9 2.9	1.9 3.2
	4.8	5.1
The fair values of the major categories of scheme assets expressed as a percentage of the total were:     Equities     Gilts     Property     Cash and annuities     Diversified growth fund	37.8% 20.7% 6.8% 0.7% 34.0%	36.5% 20.6% 7.2% 0.8% 34.9%
The return on the scheme's assets was:	100.0%	100.0%
Interest income	7.5	8.1

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 10) was:

	Employer contributions 2016 £m	Provisions (note 25) 2016 £m	Total 2016 £m	Employer contributions 2015 £m	Provisions (note 25) 2015 £m	Total 2015 £m
USS	86.7	13.0	99.7	75.7	54.1	129.8
CPS	28.1	(3.1)	25.0	28.1	(6.7)	21.4
PCPF	2.7	(1.0)	1.7	2.6	(1.0)	1.6
PSSPS	3.4	(3.2)	0.2	3.4	(3.1)	0.3
NHSPS	2.2	- '-	2.2	2.2	_	2.2
Other pension schemes	3.0	-	3.0	5.1	-	5.1
	126.1	5.7	131.8	117.1	43.3	160.4

# 33 Principal subsidiary and associated undertakings and other significant investments

The following undertakings were subsidiary undertakings throughout the year ended 31 July 2016. 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 in		
Energy Efficiency in Singapore Limited	а	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 Institute for Sustainability Leadership		
(Australia)	b	Sustainability leadership programmes
Cambridge Institute for Sustainability Leadership		, pp
(South Africa)	С	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	d	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		Dental services
UTS Cambridge		Primary school education
Associated Trusts	d	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	е	Overseas office services
Cambridge Avaliacao Representacao e Promocao Ltda	f	Overseas office services
Cambridge Assessment Inc	g	Holding entity
Cambridge English (Aus)	ĥ	Examination services
Cambridge Boxhill Language Pty Limited	h	Examination services
Fundacion UCLES	i	Overseas office services
Oxford and Cambridge International Assessment		
Services Limited		Overseas office services
Oxford Cambridge and RSA Examinations	d	Examination and assessment services

### 33 Principal subsidiary and associated undertakings and other significant investments (continued)

Cambridge University Press subsidiary undertakings	j	
Academic Journal Publishing Pty Limited	h	Intermediate holding company
Australian Academic Press Pty Group Limited	h	Publishing and distribution
Cambridge Daigaku Shuppan KK	k	Representative office
Cambridge Knowledge (China) Limited	I	Representative office
Cambridge University Press (Greece) EPE	m	Representative office
Cambridge University Press (Holdings) Limited		Multi-purpose holding company
Cambridge University Press India (Private) Limited	n	Publishing and distribution
Cambridge University Press Nigeria Limited	0	Publishing and distribution
Cambridge University Press Operations Limited		Shared services support company
Cambridge University Press Satış ve Dağıtım		
Ticaret Limited Şirketi	р	Representative office
Cambridge University Press South Africa		
(Proprietary) Limited	q	Publishing and distribution
Cambridge Hitachi-Solutions Education Limited, subsequently		
renamed Cambridge Learning Limited	r	Electronic educational publishing
Editorial Edicambridge Cia Ltda	s	Representative office
Digital Services Cambridge Limited		Software development
ELT Trading Limited	t	Publishing
HOTmaths Pty Limited	u	Web-based maths digital learning
United Publishers Services Limited	ı	Distribution
Cambridge ClassServer LLP	٧	Development of digital educational material for China

- Cambridge Centre for Advanced Research in Energy Efficiency 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. 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.
- Cambridge Institute for Sustainability Leadership (South Africa) is incorporated in South Africa. These entities are exempt charities established by trust deeds (see note 36).
- Cambridge Assessment Singapore is incorporated in Singapore.
- Cambridge Avaliacao Representacao e Promocao Ltda is incorporated in Brazil.
- Cambridge Assessment Inc is a United States non-stock non-profit corporation.
- Cambridge English (Aus), Cambridge Boxhill Language Pty Limited, Academic Journal Publishing Pty Limited and Australian Academic Press Pty Group Limited are incorporated in Australia.
- Fundacion UCLES is incorporated in Spain.
- 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).
- Cambridge Daigaku Shuppan KK is incoporated in Japan.
- Cambridge Knowledge (China) Limited and United Publishers Services Limited are incorporated in Hong Kong. Cambridge University Press (Greece) EPE is incorporated in Greece.
- m
- Cambridge University Press India (Private) Limited is incorporated in India.
- Cambridge University Press Nigeria Limited is incorporated in Nigeria.
- Cambridge University Press Satis ve Dağıtım Ticaret Limited Şirketi is incorporated in Turkey
  Cambridge University Press Satis ve Dağıtım Ticaret Limited Şirketi is incorporated in Turkey
  Cambridge University Press South Africa (Proprietary) Limited is a 75% subsidiary incorporated in South Africa.
  During the year, the University held 60% of the issued share capital in Cambridge Learning Limited. Since the year-end the company has become wholly-owned.
- Editorial Edicambridge Cia Ltda is incorporated in Ecuador. ELT Trading Limited is incorporated in Mexico.
- HOTmaths Pty Limited is a 55% subsidiary incorporated in Australia
- 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.

# 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 18). 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	Principal Activity
Ampika Limited	40	Commercial exploitation of intellectual property
Cambridge in America	22	Fundraising
Morphogen-IX Limited	28	Commercial exploitation of intellectual property
Reduse Limited	24	Commercial exploitation of intellectual property
ROADMap Systems Limted	32	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

#### 34 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 10) 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 35 below. Included within the financial statements are other transactions with the following related parties:

#### **Academy of Medical Sciences**

The Academy of Medical Sciences is an independent registered charity governed by a Council that includes a member of the University's Council. Research grants and contracts income for the year ended 31 July 2016 includes £386,000 in respect of grants funded by the Academy, of which £178,000 was included in creditors at the year end.

## Cambridge University Hospitals NHS Foundation Trust

Cambridge University Hospitals NHS Foundation Trust (the 'Trust'), comprising Addenbrooke's and the Rosie hospitals, is controlled by a membership of patients, public and staff who are represented by a council of governors which includes a member of the University's key management personnel. Research grants and contracts income for the year ended 31 July 2016 includes £28.8m in respect of continuing grants funded by the Trust, and £14.5m was invoiced to the Trust in respect of other services, principally salary recharges. The University made payments to the Trust totalling £7.2m in the year ended 31 July 2016. Balances with the Trust at the year end were trade debtors £4.2m, trade creditors £0.5m and net research invoiced in advance and treated as a creditor £8.9m.

#### 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 2015-16 financial year. Under Statutes and Ordinances, Chapter II, the University has discretion to provide financial assistance to the Union and, in the year ending 31 July 2016, provided a grant of £291,000 and made other payments totalling £16,000 for services provided. The Union made payments to the University totalling £11,000 for temporary staff, network and other services provided.

## **Gatsby Charitable Foundation**

Lord Sainsbury of Turville, the Chancellor of the University, 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 2016 includes £8.7m in respect of continuing grants funded by Gatsby of which £3.3m 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 2) in accordance with the University's accounting policies. At 31 July 2016 current liabilities included £13.8m in respect of funding received from HEFCE but not yet recognised as income.

# 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 2016 includes £163,000 in respect of grants funded by Kidney Research UK, of which £56,000 was in included in debtors at the year end.

# University of Cambridge Graduate Union

The President of the Graduate Union was also a member of the University's Council for the 2015-16 financial year. Under Statutes and Ordinances, Chapter II, the University has discretion to provide financial assistance to the Graduate Union and, in the year ending 31 July 2016, provided a grant of £100,000. The Union made payments to the University totalling £11,000 for network and other services provided.

### 35 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 £64.1m (2015: £45.3m) 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 11 above. Other operating expenses also include £3.6m (2015: £4.6m) in respect of payments to the Isaac Newton Trust, a charitable trust established by Trinity College, as contributions to a bursary scheme for students of the University (see note 36).

The University distributed third party donations to the Colleges totalling £7.5m (2015: £7.2m); 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 £3.6m (2015: £3.2m), and the Colleges provided accommodation, catering and other services to the University for which the University paid a total of £9.5m (2015: £9.2m). During the year the Colleges made donations to the University totalling £6.4m (2015: £2.5m).

Current asset investments include £176.7m (2015: £136.9m) held on behalf of 13 (2015: 11) Colleges in the form of CUEF units (see note 30) and £10.6m (2015: £10.0m) held on behalf of the Isaac Newton Trust.

Colleges Fund	2016	2015
	£000	£000
Balance at 1 August	20	17
Contributions received from Colleges	4,292	4,139
Interest earned	4	4
Payments to Colleges	(4,310)	(4,140)
Balance at 31 July included in creditors	6	20

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.

#### 36 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:

			larket value		
	Balance		Expenditure	increase	balance
	£m	£m	£m	£m	£m
Consolidated (see note 33)					
Cambridge Commonwealth, European and International Trust	120.2	23.9	(22.5)	7.7	129.3
Gates Cambridge Trust	226.5	7.9	(8.3)	13.5	239.6
Malaysian Commonwealth Studies Centre in Cambridge	7.3	0.3	(2.6)	-	5.0
The Dennis S Avery and Sally Tsui Wong-Avery Endowment Trust	2.5	0.1	(0.1)	0.1	2.6
Oxford Cambridge and RSA Examinations	86.7	78.0	(78.2)	4.5	91.0
Strangeways Research Laboratory	1.4	0.1	-	0.1	1.6
	444.6	110.3	(111.7)	25.9	469.1
Fund balances are included in the consolidated balance sheet as:	•				
Expendable endowments	233.8				246.0
Permanent endowments	1.4				5.4
Restricted reserves	0.4				0.5
Unrestricted reserves	209.0			_	217.2
	444.6				469.1
Not consolidated				_	
Isaac Newton Trust, established by Trinity College (see note 35)					
to promote education, learning and research in the University					
(accounts drawn up to 30 June 2016)	11.6	2.1	(3.2)	(0.2)	10.3
University of Cambridge Veterinary School Trust, for the support					
of veterinary education in the University	0.9	0.9	(0.2)	-	1.6
One smaller scholarship trust	0.3	-	-	-	0.3
Registered clubs and societies:					
Cambridge University Boat Club	2.0	0.4	(0.4)	-	2.0
Cambridge University Eco Racing	-	0.1	(0.1)	_	-
Cambridge University Polo Club	0.3	0.1	(0.2)	-	0.2
Cambridge University Real Tennis Club	0.2	0.1	(0.1)	-	0.2
Cambridge University Rugby Union Football Club	0.8	0.6	(0.7)	-	0.7
Cambridge University Women's Boat Club Association	0.4	0.5	(0.3)	-	0.6
410 smaller clubs and societies	3.2	2.6	(2.3)	-	3.5
	19.7	7.4	(7.5)	(0.2)	19.4

2015

Notes to the accounts (continued)

## 37 Financial risk management

In the ordinary course of its activities, the University manages a variety of financial risks including credit risk, liquidity 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 30), 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, 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:

	£m	2015 £m
Interest-bearing securities	15.0	14.8
Derivative financial instrument asset positions	57.7	51.7
Investment cash balances	51.8	66.6
Trade debtors: invoices receivable	157.3	168.4
Other debtors	210.3	192.1
Money market investments	280.7	293.1
Cash at bank	88.1	124.6
Total financial assets exposed to credit risk	860.9	911.3

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	164.0	175.8
Less: Provision for impairment of receivables	(6.7)	(7.4)
	157.3	168.4

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 2016, trade debtors with carrying value of £55.4m (2015: £46.2m) were past their due date but not impaired.

	£m	£m
Balances against which a provision has been made	8.5	10.5
Balances not past their due date	100.1	119.1
Up to 3 months past due	40.8	36.5
3 to 6 months past due	7.4	6.2
Over 6 months past due	7.2	3.5
	164.0	175.8
Movement on provision for impairment of receivables		
Opening balance	7.4	5.4
Provided in year	0.5	3.1
Balances written off	(1.2)	(1.1)
Closing balance	6.7	7.4

# 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.

2016

2015

Notes to the accounts (continued)

### 37 Financial risk management (continued)

## a Credit risk (continued)

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

Fitch credit quality rating (short / long term)	£m	£m
F1+ / AA Highest / Very High	76.5	60.1
F1 / A+ Highest / High	81.3	46.7
F1 / A Highest / High	146.5	218.6
F2 / A- Good / High	32.1	87.4
F3 / BBB Fair / Good	25.0	2.4
Lower ratings	7.4	2.5
	368.8	417.7

### 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; while these 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.

		Between			
	Three	three	Between		
	months	months and	one and	More than	
	or less	one year	five years	five years	Total
	£m	£m	£m	£m	£m
As at 31 July 2016:	~	~	2111	~	~
Bond liabilities	6.6	6.6	52.5	815.9	881.6
Derivative financial instruments liability positions	57.7	0.0	32.3	013.3	57.7
Investments held on behalf of others	195.5	_	_	_	195.5
		-	-	-	
Bank overdraft	33.9			-	33.9
Bank and other loans	0.3	0.6	1.7	-	2.6
Finance leases	0.3	1.0	3.9	-	5.2
Other creditors excluding deferred income	161.0	3.5	-	-	164.5
Totals at 31 July 2016	455.3	11.7	58.1	815.9	1,341.0
As at 31 July 2015:					
Bond liabilities	6.6	6.6	52.5	829.0	894.7
Derivative financial instruments liability positions	51.7	-	32.3	023.0	51.7
Investments held on behalf of others	151.6	_	_	_	151.6
Bank overdraft	12.1	_			12.1
Bank overdrant  Bank and other loans	0.4	1.6	1.5	_	3.5
Finance leases	0.4	1.0	3.0	_	4.6
				_	
Other creditors excluding deferred income	139.3	0.6	1.1		141.0
Totals at 31 July 2015	362.1	10.0	58.1	829.0	1,259.2

Capital commitments, excluded from the above analysis, are disclosed at note 31.

# c 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.

# 37 Financial risk management (continued)

# 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:

	2010	2015
Pounds Sterling	52.7%	54.9%
US Dollar	30.6%	29.6%
Euro	3.6%	3.4%
Japanese Yen	4.2%	4.5%
Other currency	8.9%	7.6%
	100.0%	100.0%

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.

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

	US Dollar \$m	Euro €m	US Dollar £m	Euro £m	Other £m	Total £m
CUEF investment assets excluding currency contracts CUEF forward currency contracts	1,311.8 (854.4)	138.8 (140.3)	840.6 (547.5)	98.3 (99.3)	360.1 (49.7)	1,299.0 (696.5)
Net exposure of CUEF Exposures outside CUEF:	457.4	(1.5)	293.1	(1.0)	310.4	602.5
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

The following table summarises the significant assets and liabilities exposed to currency risk as at 31 July 2015:

	US Dollar	Euro	US Dollar	Euro	Other	Total
	\$m	€m	£m	£m	£m	£m
CUEF investment assets excluding currency contracts CUEF forward currency contracts	1,949.2	252.5	1,249.1	178.8	364.9	1,792.8
	(774.9)	(131.1)	(496.6)	(92.8)	(56.5)	(645.9)
Net exposure of CUEF Exposures outside CUEF:	1,174.3	121.4	752.5	86.0	308.4	1,146.9
Debtors Cash balances Creditors including bank and other loans	44.7	15.8	28.6	11.2	19.9	59.7
	14.5	6.6	9.3	4.7	11.0	25.0
	(44.1)	(6.6)	(25.2)	(2.0)	(12.6)	(39.8)
Net exposure	1,189.4	137.2	765.2	99.9	326.7	1,191.8

The impact on total recognised gains for the year 2014-15 of additional 10% variations in the principal exchange rates would have been:
10% US Dollar appreciation
76.5
10% Euro appreciation
10.0

# 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.

### 37 Financial risk management (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 2016 the University held £15.0m (2015; £14.8m) of 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.

### 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 raded 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 30.

## 38 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 (2015: £342.4m, see note 24) whereas the fair value of the Bond liabilities at 31 July 2016 was £513m (2015: £414m) based on trading nearest to the balance sheet date. The book values of the Group's other financial assets and liabilities shown on the balance sheet are the same as the fair values.

# 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.

Investment assets at fair value as at 31 July 2016	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
CUEF: Quoted investments Unquoted investments Derivative financial instruments asset positions Cash in hand and at investment managers	767.1 - 57.7 51.8	11.6 1,917.7 – –	5.7 - -	778.7 1,923.4 57.7 51.8
Total CUEF assets Other quoted investments Other unquoted investments Investment properties Money market investments Cash in hand and at investment managers	876.6 11.7 - 40.6 10.7	1,929.3 - 7.7 288.0 - -	5.7 - 32.6 - - -	2,811.6 11.7 40.3 288.0 40.6 10.7
Total investment assets at fair value Derivative financial instruments liability positions (CUEF)	939.6 (57.7)	2,225.0 -	38.3	3,202.9 (57.7)
Total investments at fair value at 31 July 2016	881.9	2,225.0	38.3	3,145.2
Investment assets at fair value at 31 July 2016  Investment assets at fair value as at 31 July 2015  CUEF: Quoted investments	778.2 - 51.7 66.6	2,225.0 - 1,685.2 - -	21.7	778.2 1,706.9 51.7 66.6
Investment assets at fair value as at 31 July 2015  CUEF: Quoted investments	778.2 - 51.7			778.2 1,706.9 51.7
Investment assets at fair value as at 31 July 2015  CUEF: Quoted investments	778.2 51.7 66.6 896.5 29.8	1,685.2 - - 1,685.2 - 55.6 161.0	21.7 - - 21.7 39.9	778.2 1,706.9 51.7 66.6 2,603.4 29.8 95.5 161.0

2015

2016

Notes to the accounts (continued)

#### 38 Fair value (continued)

indication of the opening and discong subtracts for Level of account incacance at fair value to account in the table below.	£m	£m
Fair value 1 August 2015	61.6	72.2
Purchases less sales proceeds	(16.4)	(22.0)
Total gains / (losses)	8.2	11.4
Transfers out of Level 3	(15.1)	-
Fair value 31 July 2016	38.3	61.6

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.

### 39 Transition to FRS 102

This is the first year for which the University has presented its results under FRS 102. The last financial statements prepared under the previous UK GAAP were for the year ended 31 July 2015. The date of transition to FRS 102 was 1 August 2014. Set out below are the changes in accounting policies which reconcile surplus for the financial year ended 31 July 2015 and total reserves as at 1 August 2014 and 31 July 2015 between UK GAAP as previously reported and FRS 102. Reference is also made to the requirements of the Statement of Recommended Paractice: Further and Higher Education (SORP) published in 2015, which replaced the previous SORP and gives guidance to the sector in the implementation of FRS 102.

### (a) Recognition of capital grants

Grants and donations are received for the purposes of funding the acquisition and construction of fixed assets. In previous years, in the case of depreciable assets, these were credited to deferred capital grants when receivable and released to income over the expected useful life of the respective assets in line with the depreciation policy. Such grants and donations, whether from government or other sources, are now recognised in income when receivable, and where relevant are included in restricted reserves until spent.

## (b) Operational property

In previous years the University had a policy of stating operational land and buildings at their 1994 valuation with subsequent additions at cost. On transition to FRS 102 the University has elected to use a new valuation of land and buildings at 1 August 2014 as the deemed cost for those assets. This has resulted in an increase of £790.5m in the book value of operational land and buildings at the transition date. The depreciation charge on the building assets for the year ended 31 July 2015 has been restated based on the deemed cost at 1 August 2014 and on useful remaining lives as determined in relation to the valuation. The resulting depreciation charge on buildings for the year ended 31 July 2015 is £5.4m lower than that previously stated.

# (c) Multi-employer defined benefit pension scheme: deficit recovery payments

The University is a participating employer in the Universities Superannuation Scheme (USS), a multi-employer defined benefit pension scheme. The University continues to account as if the USS were a defined contribution scheme. Following the requirements of FRS 102, the University recognises a liability for the present value of future contributions payable to the USS to the extent that they represent payments towards recovering the deficit in the USS as identified in the schedule of contributions agreed between the USS and participating employers in effect at the balance sheet date.

# (d) Defined benefit pension schemes

In previous years the University recognised an expected return on defined benefit plan assets in the income and expenditure account. Under FRS 102 a net interest expense, based on the net defined benefit liability, is recognised in the statement of comprehensive income. There has been no change in the defined benefit liability at either 1 August 2014 or 31 July 2015. The effect of the change has been to increase the charge against the surplus in the year to 31 July 2015 by £20.5m and increase the credit in other comprehensive income by an equivalent amount.

The net liability in respect of the Cambridge Unversity Assistants' Contributory Pension Scheme (CPS) has previously been recognised in the consolidated balance sheet, but not in the University's own balance sheet. FRS 102 requires that one entity in the group recognises the net liability in its financial statements, and so the net liability is now recognised in the University balance sheet. No estimate of the extent to which the net liability is attributable to subsidiary entities is reflected in these accounts.

# (e) Recognition of research income

In previous years restricted grants for research were recognised in income to the extent that recoverable expenditure was incurred in the period. Under FRS 102, grants for research which are classified as government grants or non-exchange transactions are recognised when receivable subject to any performance-related conditions. In cases where grants are received with no performance-related conditions, or where such conditions are met in advance of expenditure being incurred, this results in an acceleration of income recognition. Income recognised in advance of cost is credited to restricted reserves.

# (f) Holiday pay accruals

FRS 102 requires short term employee benefits to be charged to the statement of comprehensive income as the employee service is received. This has resulted in the University recognising a liability for holiday pay of £9.7m, net of the element recoverable from research sponsors, on transition to FRS 102. Previously holiday pay accruals were not recognised and were charged to the income and expenditure account as they were paid. In the year to 31 July 2015 a charge of £0.2m was recognised in the statement of comprehensive income and the net liability at 31 July 2015 was £9.9m.

# (g) Reclassification of investments

In compliance with the previous SORP, previous balance sheets included three classes of investments: fixed asset investments, endowment assets and current asset investments. Endowment assets were not included in current assets. The current SORP specifies two classes of investment, namely non-current assets and current assets.

# (h) Restricted reserves

The SORP requires restricted reserves to be identified in the statement of comprehensive income and balance sheet. The University has identified a number of restricted reserves, including: (i) the unspent balances of donations made for restricted purposes, which were classified as expendable endowments under the previous SORP; (ii) unspent capital grants as noted in (a) above; and (iii) research grants received in advance of spend as noted in (e) above.

# 39 Transition to FRS 102 (continued)

	Balance at 1 August 2014 £m	Surplus for the year £m	prehensive income £m	31 July 2015 £m
Movement in total reserves and endowments as previously reported in the consolidated state recognised gains and losses (STRGL)	2,653.0	12.6	319.5	2,985.1
Adjustments on transition to FRS 102:				
Income previously recognised in the STRGL now included in surplus:				
New endowments	-	27.5	(27.5)	-
Gain on investments	_	329.2	(329.2)	_
Capital grants recognised in income (a)	523.3	52.8	-	576.1
Operational property (b)	790.5	4.0	-	794.5
Deficit recovery payments: USS (c)	(55.4)	(55.7)	-	(111.1)
Defined benefit pension schemes (d)	_	(20.5)	20.5	-
Research income recognition (e)	8.7	6.7	-	15.4
Holiday pay accruals (f)	(9.7)	(0.2)	-	(9.9)
Accrued scholar payments	(7.9)	(0.4)	-	(8.3)
Other adjustments	0.2	(0.1)	(0.1)	_
Total adjustments on transition to FRS 102	1,249.7	343.3	(336.3)	1,256.7
Inclusion of non-controlling interest in unrestricted reserves				
(see note 29)	0.8	-	-	0.8
As reported in the statement of changes in reserves	3,903.5	355.9	(16.8)	4,242.6

Group balance	choot at 3	1 July 2015: no	at accate

oup balance sheet at 31 July 2015: net assets	Non-current assets £m	Current assets £m	Current liabilities £m	Other liabilities and provisions £m	Net assets £m
As previously reported	4,194.1	889.8	(716.7)	(805.3)	3,561.9
Adjustments on transition to FRS 102:					
Operational property (b)	794.7	_	_	_	794.7
Deficit recovery payments: USS (c)	_	_	_	(111.1)	(111.1)
Research income recognition (e)	_	-	15.4	` _ ′	` 15.4 <sup>´</sup>
Holiday pay accruals (f)	_	1.5	(11.4)	_	(9.9)
Reclassification of investments (g)	(91.4)	91.4		_	_
Finance lease recognised	4.6	-	(1.6)	(3.0)	_
Accrued scholar payments	-	-	1.6	(10.0)	(8.4)
Total adjustments on transition to FRS 102	707.9	92.9	4.0	(124.1)	680.7
As reported in the group balance sheet	4,902.0	982.7	(712.7)	(929.4)	4,242.6

# Group balance sheet at 31 July 2015: funds and reserves

	Deferred capital grants £m	Endowment reserves £m	Restricted reserves £m	Unrestricted reserves £m	Non- controlling interest £m	Total £m
As previously reported	576.0	1,455.3	-	1,529.8	0.8	3,561.9
Adjustments on transition to FRS 102:						
Capital grants recognised in income (a)	(576.0)	_	29.5	546.5	_	_
Operational property (b)	· - '	_	_	794.7	_	794.7
Deficit recovery payments: USS (c)	_	_	_	(111.1)	_	(111.1)
Research income recognition (e)	_	_	15.4		-	15.4
Holiday pay accruals (f)	_	_	_	(9.9)	-	(9.9)
Reclassification of restricted reserves (h)	_	(37.0)	37.0	-	-	_
Accrued scholar payments	-	(4.3)	-	(4.1)	_	(8.4)
Total adjustments on transition to FRS 102	(576.0)	(41.3)	81.9	1,216.1	-	680.7
Inclusion of non-controlling interest in unrestricted reserves (see note 29)	_	_	-	0.8	(0.8)	
As reported in the group balance sheet		1,414.0	81.9	2,746.7	-	4,242.6

### 39 Transition to FRS 102 (continued)

Univ

versity balance sheet at 31 July 2015: net assets	Non-current assets £m	Current assets £m	Current liabilities £m	Other liabilities and provisions £m	Net assets £m
As previously reported	3,751.5	1,303.1	(1,147.4)	(452.8)	3,454.4
Adjustments on transition to FRS 102:					
Operational property (b)	788.7	_	_	_	788.7
Deficit recovery payments: USS (c)	_	_	-	(105.9)	(105.9)
Defined benefit pension schemes (d)	_	-	-	(350.5)	(350.5)
Research income recognition (e)	_	-	15.4	_	15.4
Holiday pay accruals (f)	_	1.4	(10.8)	_	(9.4)
Reclassification of investments (g)	(82.9)	82.9			-
Finance lease recognised	4.6	-	(1.6)	(3.0)	
Total adjustments on transition to FRS 102	710.4	84.3	3.0	(459.4)	338.3
As reported in the University balance sheet	4,461.9	1,387.4	(1,144.4)	(912.2)	3,792.7

University balance sheet at 31 July 2015: funds and reserves	Deferred capital grants £m	Endowment reserves £m	Restricted reserves £m	Unrestricted reserves £m	Total £m
As previously reported	576.0	1,213.0	-	1,665.4	3,454.4
Adjustments on transition to FRS 102:					
Capital grants recognised in income (a)	(576.0)	_	29.5	546.5	_
Operational property (b)	` _ ´	_	_	788.7	788.7
Deficit recovery payments: USS (c)	_	_	_	(105.9)	(105.9)
Defined benefit pension schemes (d)	_	_	_	(350.5)	(350.5)
Research income recognition (e)	_	_	15.4	_	15.4
Holiday pay accruals (f)	_	_		(9.4)	(9.4)
Reclassification of restricted reserves (h)	-	(36.6)	36.6	_	-
Total adjustments on transition to FRS 102	(576.0)	(36.6)	81.5	869.4	338.3
As reported in the University balance sheet		1,176.4	81.5	2,534.8	3,792.7

Notices for publication in the *Reporter*, or queries concerning content, should be sent to the Editor, Cambridge University Reporter, Registrary's Office, The Old Schools, Cambridge, CB2 1TN (tel. 01223 332305, email reporter.editor@admin.cam.ac.uk). Advice and information on content submission is available on the *Reporter* website at http://www.reporter.admin.cam.ac.uk/. Copy should be sent as early as possible in the week before publication; short notices will be accepted up to 4 p.m. on Friday for publication the following Wednesday. Inclusion of notices is at the discretion of the Editor.

© 2016 The Chancellor, Masters, and Scholars of the University of Cambridge.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of the University of Cambridge, or as expressly permitted by law.

The University is the owner or the licensee of all intellectual property rights in the site and in the material published on it. Those works are protected by copyright laws and treaties around the world. All such rights are reserved.

Material prepared for the primary purpose of providing information about the University of Cambridge, its teaching and research activities, its subsidiary companies and organizations with which it is associated or affiliated has been placed on the site by the University ('University Material').

Subject to statutory allowances, extracts of University Material may be accessed, downloaded, and printed for your personal and non-commercial use and you may draw the attention of others within your organization to University Material posted on the site.