



Data analysis

October **2017/28**

Financial health of the higher education sector

2016-17 to 2019-20 forecasts

This report analyses the financial health of the higher education (HE) sector in England for the period 2016-17 to 2019-20, based on forecast information from higher education institutions (HEIs) submitted to HEFCE in July 2017.

It covers HEFCE-funded HEIs, and references to ‘the HE sector’ should be read in this context. Other providers of HE – further education and sixth-form colleges, and alternative providers – are not included in the analysis.



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Contents

Executive summary	2
Analysis of financial forecasts 2016-17 to 2019-20	6
Data sources and financial reporting standards.....	6
Risk	6
Sector analysis and forecast performance	7
Income	8
Student recruitment	13
Expenditure.....	21
Surpluses and cash flow.....	22
Liquidity.....	24
Borrowing.....	25
Capital expenditure.....	28
Reserves and pension deficits	31
Disclaimer	32
List of abbreviations.....	33

Financial health of the higher education sector: 2016-17 to 2019-20 forecasts

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Of interest to those responsible for	Audit, Estates, Finance, Governance, Management, Planning
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Executive summary

1. This report analyses the financial health of the higher education (HE) sector in England for the period 2016-17 to 2019-20, based on forecast information from higher education institutions (HEIs) submitted to HEFCE in July 2017. It covers HEFCE-funded HEIs, and references to 'the HE sector' should be read in this context. Other providers of HE – further education and sixth-form colleges, and alternative providers – are not included in the analysis.

Key points

2. The forecasts submitted by HE institutions would have been prepared in May and June 2017 and approved by governing bodies for submission to HEFCE in July 2017. At the time there was no certainty over the cap on home and European Union (EU) tuition fees and institutions therefore needed to make assumptions around the fee they might be able to set in future years. Some institutions made an assumption that fees would be fixed at current rates, but a majority assumed that the fees would be allowed to inflate over time.

3. The Government has since confirmed that fees would be fixed at £9,250 for 2018-19 and so this change to the fee policy will inevitably change institutional forecasts, although we know that HEIs have contingency plans in place to mitigate the full impact of no inflationary increase in fees.

4. In the light of this, we have attempted to model the impact of the fee cap on institutional forecasts for the years 2018-19 and 2019-20, assuming no inflationary increase in the fee cap. We have estimated that, while the impact is variable across institutions, the cap on fees would reduce the sector's projected income by £113 million in 2018-19 and £333 million in 2019-20. If there were no changes to cost projections, this would reduce sector surpluses from 2.1 per cent of income in 2018-19 to 1.8 per cent of income and from 3.4 per cent of income in 2019-20 to 2.4 per cent of income.

5. The findings below are based on the financial results for 2015-16 and institutional forecasts submitted to HEFCE in July 2017.

6. Our analysis of the sector's financial results for 2015-16 showed a sound financial position overall. However, there was an increasingly significant variation in the financial performance of

individual HEIs, and a widening gap between the lowest- and highest-performing institutions. Reducing surpluses and cash levels, and a rise in borrowing, signalled a general weakening of financial performance and a trajectory that was not sustainable in the long term.

7. The projections discussed in this report show a continuation of these trends. Overall, total sector income is projected to rise by 7.5 per cent in real terms, from £29 billion in 2015-16 to £33 billion in 2019-20. However, total expenditure is expected to increase at a greater rate over the same period (9.6 per cent per cent in real terms). This will cause surpluses to fall from the level reported in 2015-16 (5.2 per cent of total income).

8. Sector surpluses are projected to be between 1.3 per cent and 3.4 per cent of total income in the forecast period, relatively small margins in which to operate, although at an institutional level, these range significantly.

9. Cash flow from operating activities as a percentage of total income is expected to fall from 10.2 per cent in 2015-16 to 7.3 per cent in 2017-18, before rising to 9.1 per cent in 2019-20. At institutional level, this ranges from a negative cash flow projection of 6.7 per cent to a positive cash flow of 28.6 per cent in 2016-17. Cash flow from operating activities is an important source of funding for non-operating expenditure such as capital investment.

10. At 31 July 2016, the sector had net liquidity of £9,581 million, equivalent to 135 days' expenditure (that is, the number of days' expenditure that the liquidity covers). This is projected to fall to 81 days by the end of 2019-20. While liquidity is forecast to reduce, the sector expects to hold higher levels of liquidity for the periods ending 31 July 2017 to 31 July 2018 compared with last year's projections.

11. Sector borrowing is projected to rise from £8.9 billion at the end of 2015-16 to £11.7 billion by the end of 2019-20. Relative to total income, sector borrowing levels are projected to reach 36.8 per cent by the end of 2018-19, before falling to 35.1 per cent by the end of 2019-20.

12. Borrowing levels are expected to exceed liquidity levels in all forecast years, by £577 million at 31 July 2017, increasing significantly to £5 billion at 31 July 2020. While this does not raise an immediate viability concern, the current trajectory of increasing borrowing and reducing liquidity is unsustainable in the long term.

Student recruitment

13. The market for higher education has become increasingly competitive, both at home and globally.

14. While there tends to be considerable variation in HEI student recruitment forecasts accompanying financial projections, our analysis of forecasts from last year (July 2016), suggested that, overall, the sector may have been optimistic in the numbers of students that it was projecting to recruit from 2016-17.

15. These latest forecasts show that the sector is projecting growth of 6.0 per cent in full-time undergraduate home and EU students between 2016-17 and 2019-20, with numbers expected to grow by 4.0 per cent between 2016-17 and 2018-19. This is lower than the level of growth projected in July 2016, which was 4.9 per cent over the period 2016-17 to 2018-19.

16. UCAS placed applicants data published in September 2017 show a 1.9 per cent decline in home and EU placed applicants to English HEIs for the 2017-18 entry year compared with

2016-17. However the sector has projected growth of 2.1 per cent in this group of students over the same period.

17. Although recruitment projections are lower overall than forecast in July 2016, they are nonetheless significant. The declining population of 18-year-olds, the potential impact of Brexit on student recruitment, and the increasing availability of alternative post-18 educational options such as degree apprenticeships present challenges. Some HEIs may find it difficult to achieve their recruitment projections, and will therefore need to manage the financial risks of any negative variations in their growth ambitions.

18. In terms of non-EU student recruitment, the latest projections show that the sector is expecting numbers to grow by 14.0 per cent between 2016-17 and 2019-20, with growth in the period 2016-17 to 2018-19, expected to be 8.9 per cent. This again marks a downward projection compared with last year when the comparable figure was 11.1 per cent.

19. The sector is projecting fee income from non-EU students to rise from £4.0 billion in 2016-17 to £5.1 billion in 2019-20, an increase of 27.5 per cent over the period and by 2019-20, income generated through tuition fees from international students is expected to represent 27.7 per cent of all tuition fee and education contract income and 15.2 per cent of total income. However, at institutional level this ranges from 0 per cent to 40.7 per cent (of total income).

20. Some of this growth is due to higher fees as opposed to expansion in the international student population. Recent forecasts suggest income from international students in 2016-17 was very close to that forecast a year earlier, albeit approximately 1.5 per cent (£60 million) below expectations. However overseas student numbers in 2016-17 were reported as approximately 4.5 per cent below the target forecast a year earlier.

21. Although the weaker pound, relative to international currencies, may incentivise international student recruitment, it may be a challenge for some institutions to achieve their predicted growth levels. This would in turn have a significant adverse impact on the sector's financial projections overall.

Capital investment

22. Significant increases in capital investment are projected over the forecast period. At over £19.4 billion, this represents an average annual investment of £4.8 billion, 48 per cent higher than the previous four-year average. However, there is much variation between HEI capital investment plans, with just over a quarter of HEIs in the sector planning to reduce capital expenditure over the forecast period compared with the previous four years (2012-13 to 2015-16).

23. While there has been significant capital investment in the last period, the sector's latest estimate is that it still needs to invest £3.6 billion in its non-residential estate to restore it to a sound baseline condition. Inflationary pressures on the cost of construction are likely to push this figure higher. This estimate does not reflect the cost of improving the estate to a standard required to meet rising student expectations and to enable HEIs fully to compete in the increasingly competitive global market.

24. To help fund capital expenditure during 2015-16, the sector used £1.6 billion from its own cash reserves (equivalent to 5.6 per cent of total income) and committed to new borrowing of £1.1 billion. Capital grant receipts of £860 million were also reported.

25. The sector is reliant on generating surpluses, continued government support and the availability of borrowing to maintain the scale of investment required to meet achieve their estate plans, build capacity for growth and to support its international competitiveness.

Reserves and pension deficits

26. Reserves are an HEI's total assets less its liabilities and, in very broad terms, can be used as a proxy for the overall value of an institution. These are the value of accumulated surpluses of an institution over its lifetime and are not the same as cash, although an institution could dispose of an asset if it was surplus to operational requirements (thereby converting its value to cash).

27. Unrestricted reserves represent the value of the institution's accumulated funds through surpluses reported in an HEI's income statement, where there are no restrictions on the use of funds, as well as an HEI's revaluation reserves. After taking into account pension liabilities, the sector reported unrestricted reserves of £28.5 billion, equivalent to 98.1 per cent of total income at the end of July 2016. These are expected to rise to £33.0 billion by the end of July 2020, although the aggregate sector position masks a significant spread of financial strength and a concentration of large unrestricted reserves in a very small number of institutions.

28. Institutions forecast pension liabilities to increase from £9.5 billion at 31 July 16 to £10.1 billion at 31 July 2020; an increase of 6.7 per cent, with the largest increase (£300 million) expected in 2017-18. This increase is largely due to a small number of institutions anticipating higher pension costs in response to the latest University Superannuation Scheme (USS) valuation, currently underway. However, it should be noted that the majority of HEIs have indicated that it is too early to make revised pension projections so have not reflected similar increases in their forecasts. This is potentially an additional cost pressure that will need to be managed by institutions over the forecast period.

Sector outlook

29. Following our assessment of the financial outturn for 2015-16, we concluded that the sector's financial position is currently stable overall. This was also supported by the evidence obtained as part of our annual accountability process.

30. The sector is facing significant uncertainty arising from Brexit, increasing global competition, the changing policy agenda, and cost pressures. This, along with increased competition in the domestic market, will present challenges to some HEIs in achieving their financial projections.

31. This is likely to lead to greater focus from investors on the financial strength of individual HEIs. Any fall in overall levels of confidence in the sector could restrict the availability of finance and put significant elements of the sector's investment programme at risk. Falling confidence levels would also be likely to lead to a rise in the cost of borrowing for those able to secure such funding.

Analysis of financial forecasts 2016-17 to 2019-20

32. This report looks at different aspects of the financial forecasts submitted by institutions for the forecast period (2016-17 to 2019-20).

Data sources and financial reporting standards

33. The data used comes from three main sources:

- a. Where available, all data up to and including 2015-16 is from the Higher Education Statistics Agency's Finance Record, which is completed by higher education institutions (HEIs) each year and is derived from audited financial statements.
- b. Financial data covering the forecast period 2016-17 to 2019-20 is from HEIs' financial forecast returns submitted to HEFCE in July 2017.
- c. Student number data for 2014-15 and 2015-16 is from the Higher Education Statistics Agency Student Record. All other student number data is from HEI's financial forecast returns.

34. All financial information is presented in academic years (ending 31 July). For references to real-terms changes in performance we have used HM Treasury's gross domestic product deflator announced in July 2017¹, with the base year set as 2015-16.

35. In some cases we have reported analysis by a peer grouping system, which comprises four levels by average undergraduate entry tariff points.

36. Financial Reporting Standard (FRS) 102 is the new financial reporting framework for higher and further education providers for reporting periods starting on or after 1 January 2015. All financial data quoted in this report from 2014-15 is consistent with FRS102.

37. Analysis of HEIs' financial results for 2015-16 submitted in December 2016 can be found in 'Financial health of the higher education sector: 2015-16' (HEFCE 2017/02)².

38. The analysis provided in this report is based on financial forecasts submitted by HEIs to HEFCE. The accuracy and reliability of these forecasts depends on the assumptions and strategies adopted by individual HEIs in response to the latest higher education reforms and prevailing market conditions.

Risk

39. HEIs are operating in an increasingly complex and competitive environment. Economic uncertainty, the uncertainties of Brexit and a changing policy agenda, alongside new demands from students are all raising the risk profile within the sector.

40. In preparing their financial forecasts, institutions identified a number of risks that could adversely affect their financial performance and sustainability. The most significant risks related to:

- increased competition affecting ability to achieve student growth projections (home, EU and overseas)

¹ See <https://www.gov.uk/government/statistics>.

² Available online at www.hefce.ac.uk/pubs/year/2017/201702/.

- the need to meet academic quality standards and student expectations
- changes in government policy and the political landscape
- the need to recruit and retain key staff
- rise in the cost of borrowing and availability of lending
- rise in staff and pension costs
- non-compliance with visa regulations
- the need to invest sufficiently in IT and estates
- the need to manage investment projects and organisational change programmes
- the need to effectively manage information and cyber security.

41. In a diverse sector every HEI will face its own unique combination of risks. The accuracy and reliability of the financial forecasts therefore relies on what assumptions HEIs have made and the extent to which they have taken these risks into account. Uncertainties over future student recruitment (home, EU and overseas), tuition fee levels, government and European Union (EU) funding and future pension costs are factors that will inevitably reduce the reliability and increase the volatility of forecasts in the sector.

42. HEFCE, in its regular engagement with HEIs, continues to discuss the actions being taken to mitigate adverse impacts.

Sector analysis and forecast performance

43. Our analysis of the sector's financial results for 2015-16³ showed a sound financial position overall. However, there was an increasingly significant variation in the financial performance of individual HEIs across the sector.

44. The latest projections predict a continuation of this trend in the forecast period (2016-17 to 2019-20), with the financial forecast data showing a widening gap between the lowest- and highest-financially performing institutions and significant variation of forecasts in the sector.

45. Table 1 provides the key headline data from the financial information submitted by HEFCE-funded HEIs in July 2017.

³ Available online at www.hefce.ac.uk/pubs/year/2017/201702.

Table 1: Summary of key financial indicators for publicly funded English HEIs

	Actual		Forecast			
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Total income	£28,030M	£29,087M	£29,697M	£30,972M	£32,060M <i>£31,947M</i>	£33,448M <i>£33,114M</i>
Surplus as a % of total income	£833M 3.0%	£1,518M 5.2%	£913M 3.1%	£408M 1.3%	£686M <i>£573M</i> 2.1% <i>1.8%</i>	£1,135M <i>£802M</i> 3.4% <i>2.4%</i>
Cash flow from operating activities, as % of total income	9.1%	10.2%	8.4%	7.3%	8.0% <i>7.6%</i>	9.1% <i>8.2%</i>
Net liquidity, as number of days' expenditure	127	135	128	104	88	81
External borrowings, as % of total income	29.4%	30.7%	33.8%	36.6%	36.8%	35.1%
Unrestricted reserves, as % of total income	101.5%	98.1%	100.7%	98.7%	98.4%	98.5%

Note: figures in italics show the forecasts adjusted to reflect modelling on the potential impact of reduced income due to a freeze in the home and EU tuition fee cap.

Income

46. The sector is projecting total income to rise from £29,087 million in 2015-16 to £33,448 million in 2019-20, equivalent to an increase of 15.0 per cent (or 7.5 per cent in real terms).

47. While overall income is projected to increase overall between 2015-16 and 2019-20, 27 individual HEIs are projecting real-terms reductions in income over the forecast period.

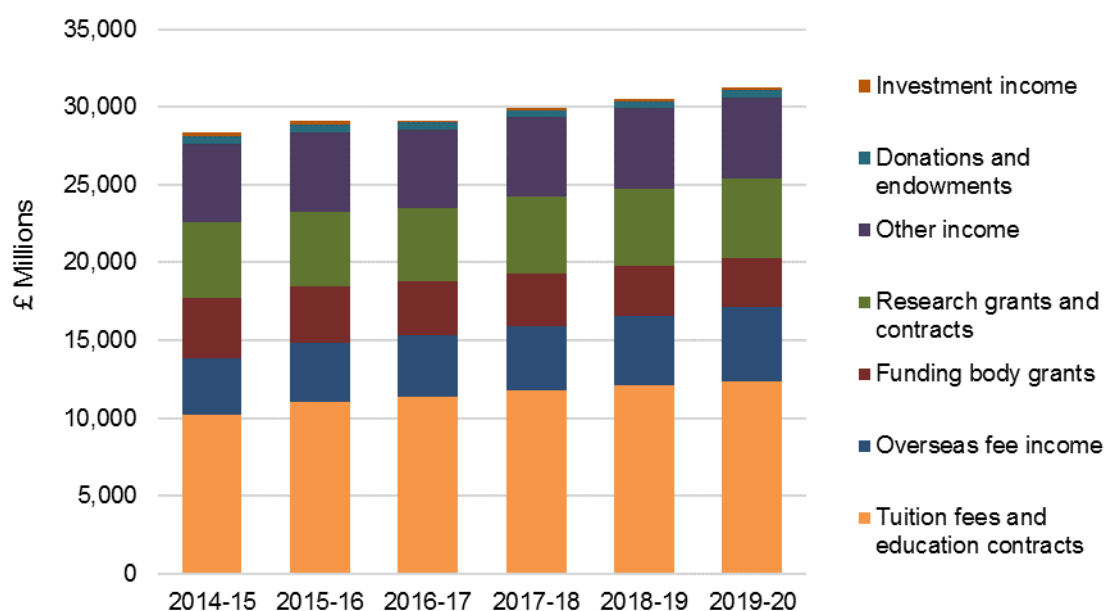
48. It should be noted however that the forecasts submitted by HEIs would have been prepared in May and June 2017 and approved by governing bodies for submission to HEFCE in July 2017. At the time there was no certainty over the cap on home and EU tuition fees and institutions therefore needed to make assumptions around the fee they might be able to set in future years. Some HEIs had made an assumption that fees would be fixed at current rates; however, a majority assumed that the fees would be allowed to inflate over time. The Government has since confirmed that fees would be fixed at £9,250 for 2018-19 and so any change to the fee policy will inevitably change institutional forecasts, though we know that institutions have contingency plans in place to mitigate the full impact of the cap in fees.

49. In the light of this, we have attempted to model the impact of the fee cap compared with what institutions are forecasting for the years 2018-19 and 2019-20 assuming no inflationary increase in the fee cap, and have estimated that, while the impact is variable across institutions, the cap on fees would reduce the sector's projected income by £113 million in 2018-19 and £333 million in 2019-20. If there were no changes to cost projections, this would reduce sector surpluses from 2.1 per cent of income in 2018-19 to 1.8 per cent of income and from 3.4 per cent of income in 2019-20 to 2.4 per cent of income.

50. The remainder of the report looks at different aspects of the financial forecasts as submitted to HEFCE in July 2017.

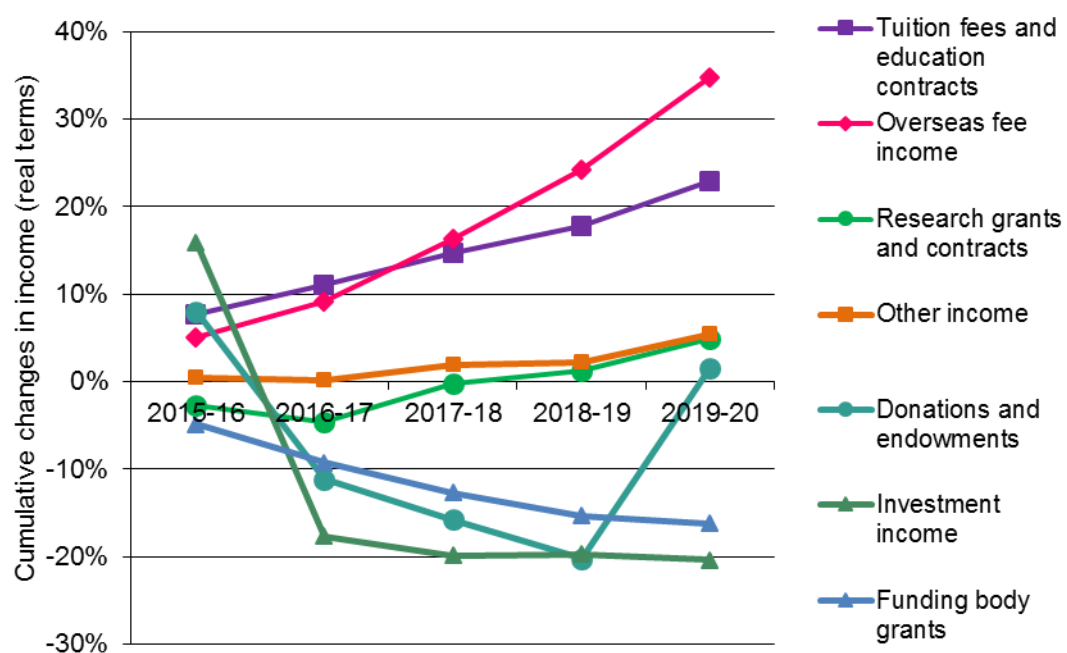
51. Figure 1 shows a breakdown of income for 2014-15 and 2015-16, together with forecast income for the years 2016-17 to 2019-20.

Figure 1: Breakdown of income (real terms)



52. Figure 2 shows the cumulative change in income (in real terms) over the same period, taking 2014-15 as the base year.

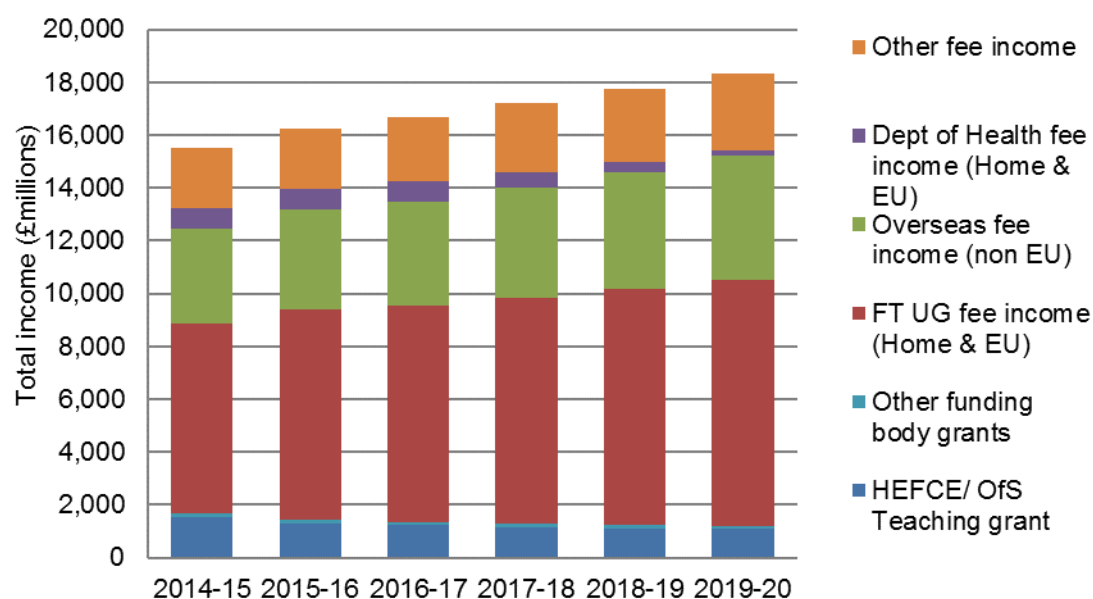
Figure 2: Cumulative real-terms changes in income since 2014-15



Teaching and tuition fee income

53. Figure 3 shows a breakdown of teaching related income received in the period 2014-15 to 2015-16, alongside projections for the period 2016-17 to 2019-20 in real terms.

Figure 3: Breakdown of actual and forecast teaching-related income (real terms) 2014-15 to 2019-20



Note: 'Other fee income' includes income from the National College for Teaching and Leadership. 'FT' = 'full-time'; 'UG' = 'undergraduate'; 'OfS' = 'Office for Students'.

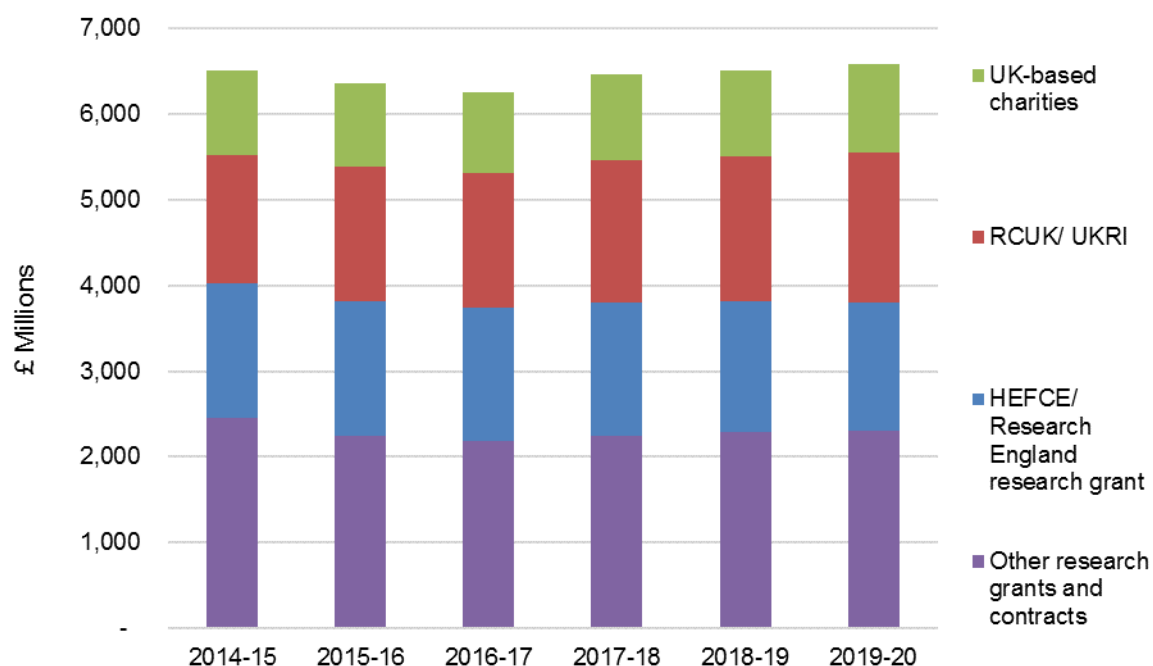
54. Overall, sector projections show a rise in teaching-related income – which includes public funding and tuition fees – from £16,271 million in 2015-16 to £18,346 million (in real terms) by 2019-20. The most significant increases were projected in fee income from full-time home and EU undergraduate students, forecast to rise by £1,345 million over the forecast period, and from international (non-EU) students, forecast to rise by £983 million over the same period.

55. The other significant rise in tuition fee income is expected to come from full-time home and EU postgraduate students, where tuition fee income is projected to rise by 48.9 per cent, from £733 million in 2015-16 to £1,092 million (in real terms) in 2019-20. This is consistent with the projected rise in student numbers in the forecast period reflecting the availability of a student loan scheme for postgraduate taught (PGT) students from 2016-17 and postgraduate research (PGR) students from 2018-19.

Research income

56. Figure 4 shows a breakdown of research income received in the period 2014-15 to 2015-16, alongside projections for the period 2016-17 to 2019-20 in real terms.

Figure 4: Research income 2013-14 to 2018-19 (real terms)



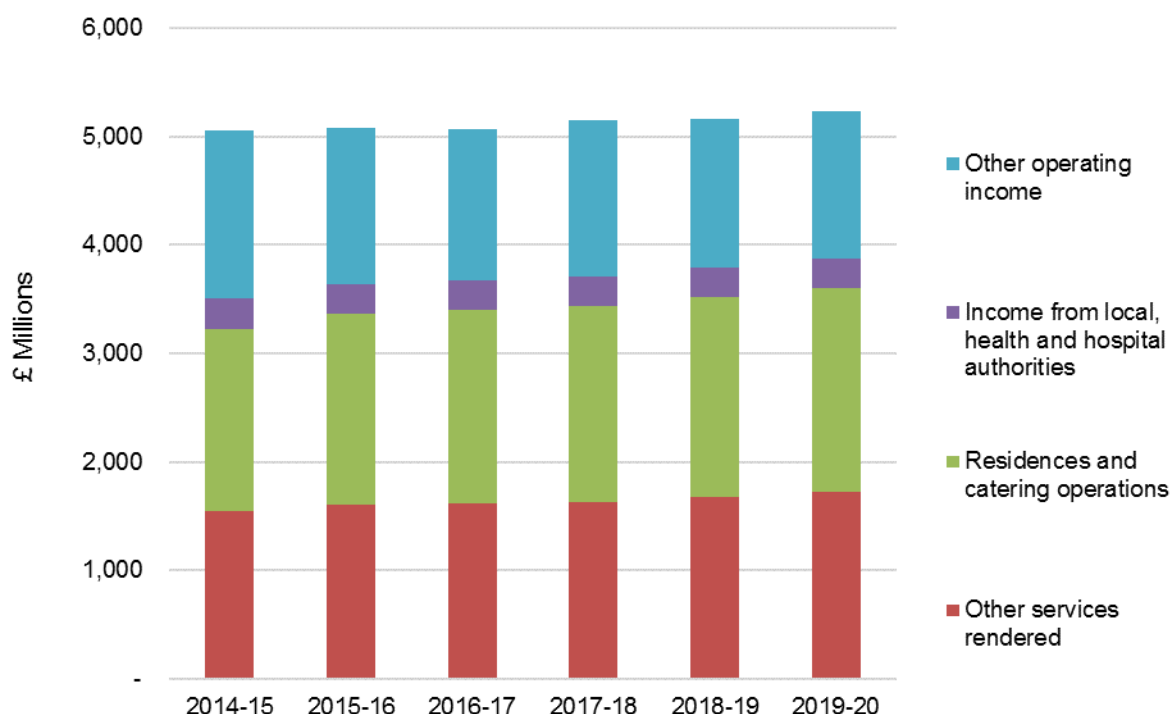
Note: 'RCUK' = 'Research Councils UK'; 'UKRI' = 'UK Research and Innovation'.

57. This shows that the sector has projected a fall in research funding in 2015-16 and 2016-17. However, research income was boosted by an injection of 'exceptional income' in 2014-15 and 2015-16, derived from the Research and Development Expenditure Credit scheme (RDEC). Without this, research income increases by 3.4 per cent in 2015-16 and decreases by 0.3 per cent in 2016-17 (real terms). Thereafter, the sector is projecting a rise in research income, from £6,248 million in 2016-17 to £6,578 million in 2019-20 (real terms). Given government commitment to additional research and development funding, this appears to be a sound basis on which to project income growth.

Other income

58. Figure 5 shows a breakdown of 'Other' income (as identified in Figure 1) received in the period 2014-15 to 2015-16, alongside projections for the period 2016-17 to 2019-20 in cash terms.

Figure 5: Other income 2014-15 to 2019-20 (real terms)



Note: 'Income from local, health and hospital authorities' excludes teaching contracts for student provision.

59. This shows that the sector is projecting a 10.4 per cent rise in Other income over the forecast period, from £5,077 million in 2015-16 to £5,237 million in 2019-20 (real terms). The greatest rises are projected in other services rendered, which reflects income in respect of services rendered to outside bodies, including the supply of goods and consultancies, and income from residences and catering operations, including conferences.

Student recruitment

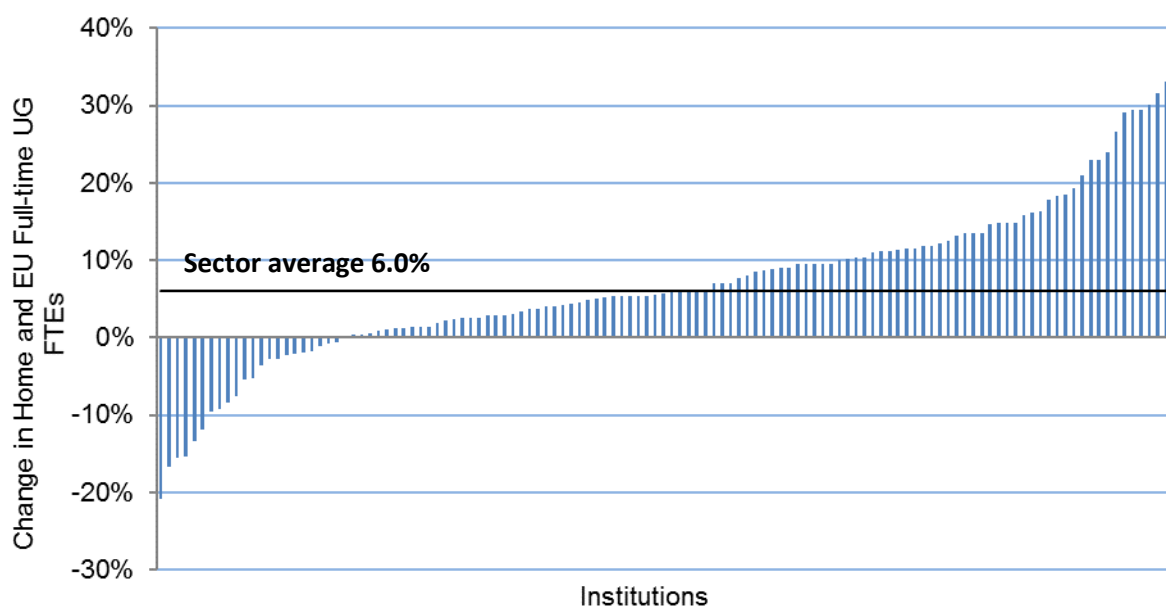
60. As part of the financial forecasts, institutions are required to send student number forecasts for 2015-16 to 2019-20 broken down by mode and level of study.

Home and EU

61. The sector is forecasting a growth of 6.0 per cent in full-time undergraduate Home and EU students between 2016-17 and 2019-20.

62. Figure 6 displays this percentage change at an institutional level, highlighting the variability between institutional forecasts.

Figure 6: Forecast change in full-time home and EU undergraduate student numbers between 2016-17 and 2019-20 (forecast)



Note: 'UG' = 'undergraduate'; 'FTE' = 'full-time equivalent'.

63. Comparing the forecasts from July 2016 and July 2017 shows that the sector has reduced its recruitment targets. In 2016 the sector forecast undergraduate home and EU students to increase by 4.9 per cent (51,939 full-time equivalent student numbers (FTEs)) between 2016-17 and 2018-19. This has now been reduced to 4.0 per cent (42,427 FTEs).

64. As reported in our paper 'Financial health of the higher education sector: 2015-16 to 2018-19 forecasts' (HEFCE 2016/34)⁴, there continue to be threats to the sector achieving even these reduced recruitment targets. These include:

- a reduction in recruitment through UCAS for 2017 entry of 2 per cent
- a declining population of 18-year-olds in the UK during the forecast period
- any negative impact of Brexit on student recruitment
- increasing options for alternative routes to undergraduate courses.

65. UCAS data only partially reflects trends in student numbers, as data is restricted to those students applying to study full-time undergraduate courses through the UCAS system. Final numbers of home and EU student new entrants in 2017-18 will not be known until the HEFCE aggregate student number surveys are available later this year. However, UCAS figures published in September 2017 show a 1.9 per cent decline in placed applicants for home and EU students to English HEIs for the 2017-18 entry year compared to the equivalent point in the 2016 cycle. This also shows a 1.9 per cent decline in placed applicants for home students (domiciled in the UK) and a 1 per cent decline in placed applicants from the EU over the same period.

⁴ Available online at www.hefce.ac.uk/pubs/year/2016/201634/.

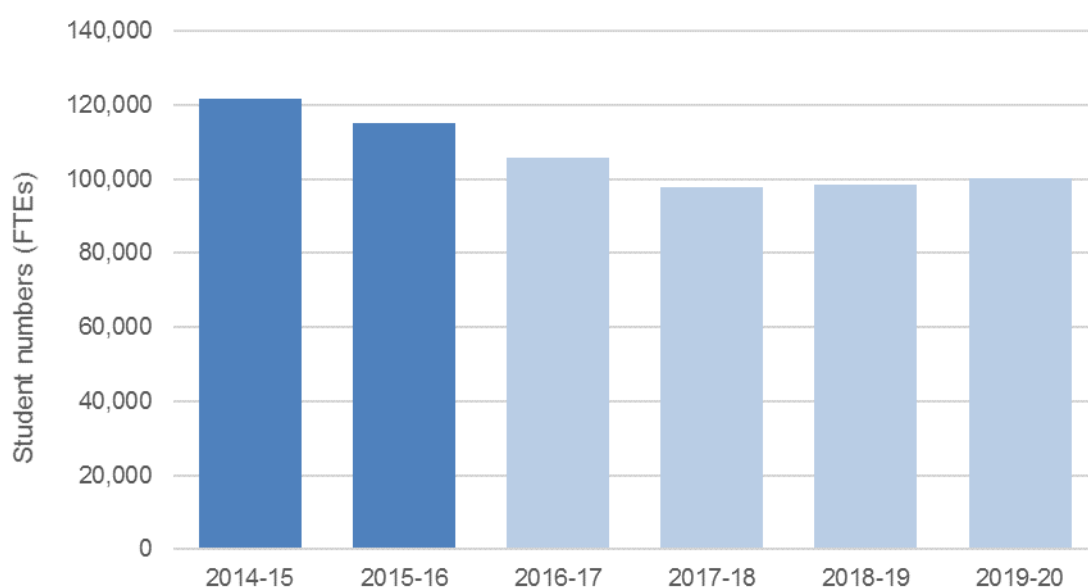
66. UCAS application data (before clearing) highlights further variation between institutions in terms of student recruitment. Low and medium tariff institutions (UK-wide) experienced a 9 and 4 per cent decline respectively in applications, while higher-tariff institutions have increased by 2 per cent.

Part-time undergraduate students (Home and EU)

67. The sector has projected a decline in numbers of part-time undergraduates between 2015-16 and 2016-17 and between 2016-17 and 2017-18, with falls of 6.7 and 4.2 per cent respectively. Student numbers are then expected to begin to recover in 2018-19 and 2019-20 (although not beyond 2015-16 levels), with increases of 1.4 and 2.1 per cent reflecting the availability of maintenance loans to part-time undergraduate students from 2018-19.

68. Figure 7 shows the total number of home and EU part-time student FTEs reported or projected by the sector for the period 2014-15 to 2019-20.

Figure 7: Part-time home and EU undergraduate student numbers 2014-15 to 2019-20



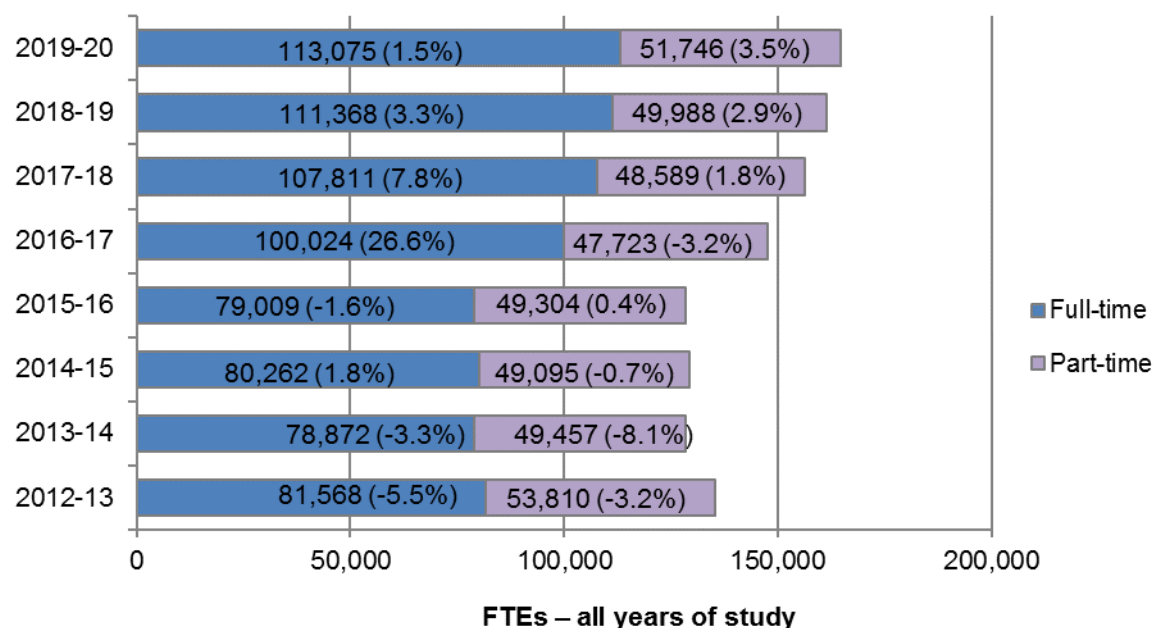
Postgraduate students

69. Projections for PGT students show that the sector is expecting full-time home and EU student numbers (FTEs) to increase by 43.1 per cent between 2015-16 and 2019-20.

70. Total PGT student numbers are forecast to increase by 15.1 per cent (19,434 FTEs) between 2015-16 and 2016-17, continuing to increase by 5.9 per cent, 3.2 per cent and 2.1 per cent in subsequent years. This reflects the availability of a student loan scheme for PGT students from 2016-17.

71. Figure 8 shows the number of full- and part-time PGT student FTEs for all years of study reported by the sector between 2012-13 and 2015-16, as well as student number forecasts for 2016-17 to 2019-20. The percentage change in student numbers compared with the previous year is also shown (in brackets).

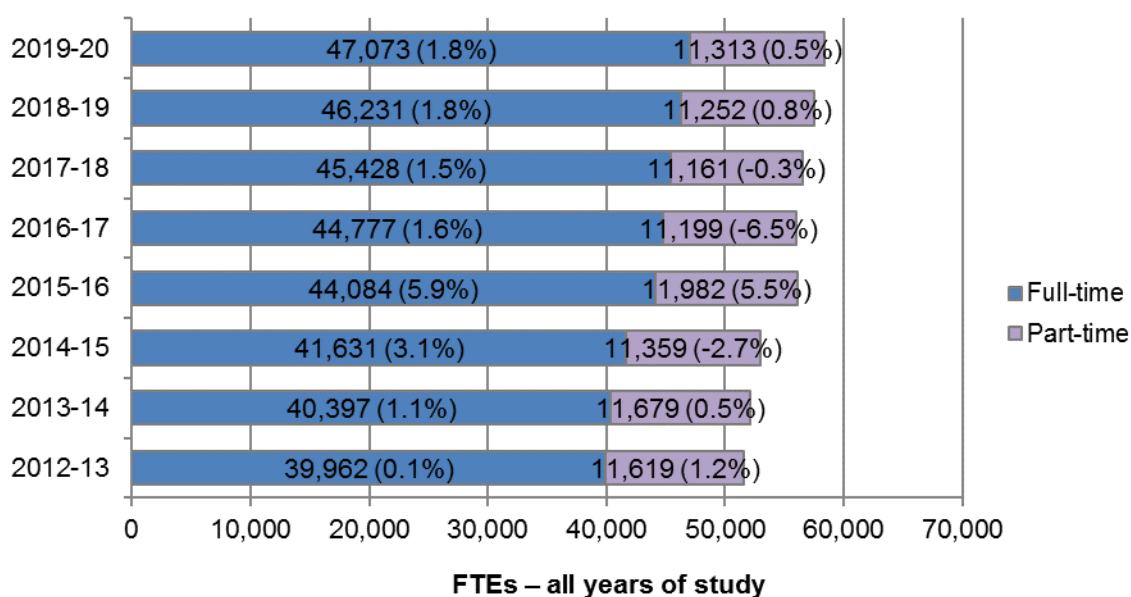
Figure 8: Postgraduate taught home and EU student numbers 2012-13 to 2019-20



72. Total PGR student numbers are forecast to have increased by 4.1 per cent (2,320 FTEs) between 2015-16 and 2019-20. This growth is driven by a 6.8 per cent increase in full-time PGR student numbers. Part-time PGR student numbers are expected to be 5.6 per cent lower in 2019-20 compared with 2015-16. Despite this, marginal growth in part-time student numbers is forecast in 2018-19 and 2019-20, which may reflect the introduction of loans for new doctoral students from 2018.

73. Figure 9 displays the annual changes of full-time and part-time postgraduate research students between 2015-16 and 2019-20.

Figure 9: Postgraduate research home and EU student numbers 2012-13 to 2019-20

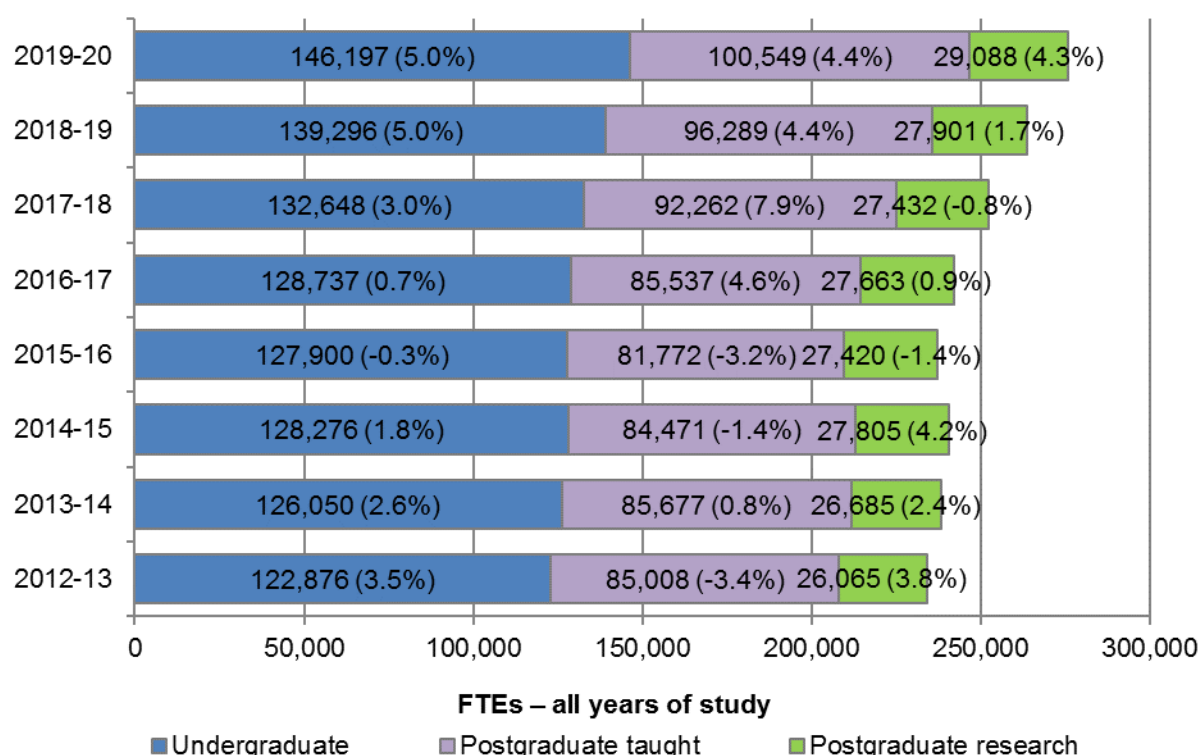


Overseas

74. The sector has forecast an increase in total overseas (non-EU) students of 16.3 per cent (38,742 FTE) between 2015-16 and 2019-20. This represents a 2.0 per cent increase between 2015-16 and 2016-17, followed by increases of 4.3, 4.4 and 4.7 per cent in subsequent years. However, this masks significant variation in the assumptions, with 37 institutions projecting lower non-EU student numbers in 2019-20 than in 2015-16.

75. Figure 10 highlights the change in overseas student numbers between 2012-13 and 2019-20 by level of study. This shows only a marginal increase in undergraduate student numbers between 2015-16 and 2016-17 (0.7 per cent), followed by increases of 3.0 per cent in 2017-18 and 5.0 per cent in both 2018-19. Postgraduate taught student numbers to rise by 18,777 FTEs over the forecast period, equivalent to an annual growth rate of 5.3 per cent, whereas postgraduate research students are expected to rise by 1,668 FTEs, equivalent to an annual growth rate of 1.5 per cent.

Figure 10: Overseas (non-EU) student numbers 2012-13 to 2019-20

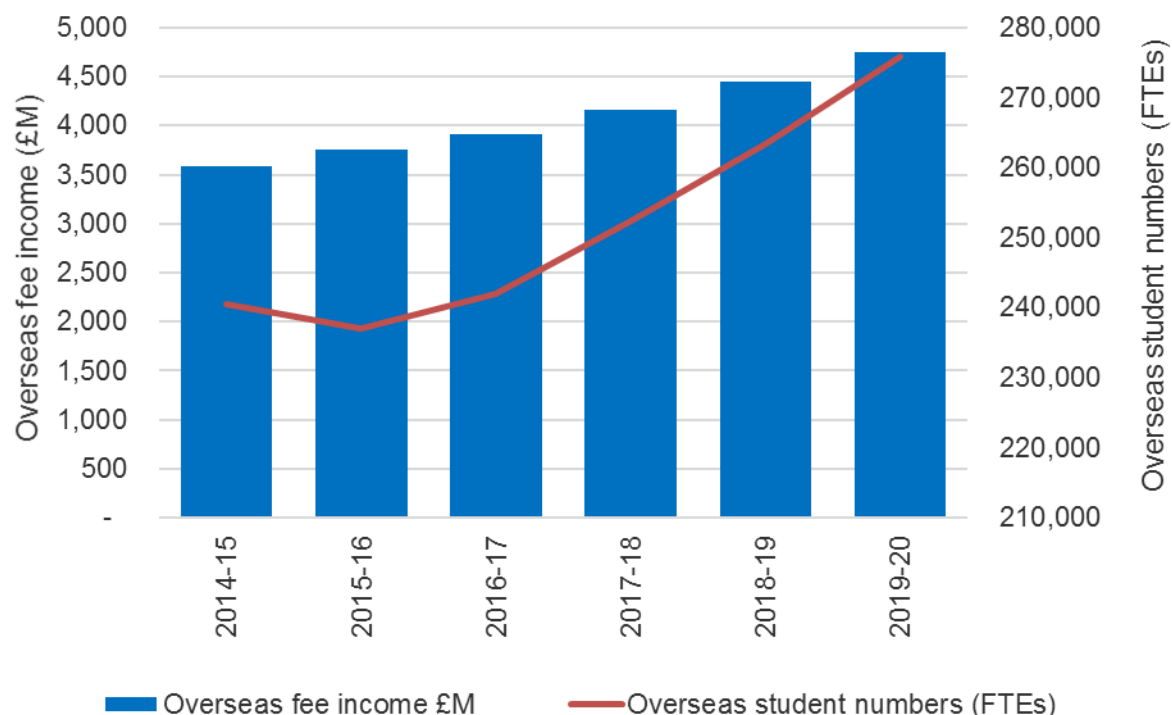


76. UCAS data will only partially reflect trends in overseas student numbers as data is restricted to those international students applying to study full-time undergraduate courses through the UCAS system. However, UCAS placed applicants data as at 14 September (28 days after A-level results day) indicates a 4 per cent increase in international students accepted to English HEIs for 2017-18 entry compared with the same survey point last year, for 2016-17.

77. The income generated through international (non-EU) students' tuition fees was £3.8 billion in 2015-16 (cash terms) and is expected to increase by 34.9 per cent (£1.3 billion) to £5.1 billion by 2019-20. This represents an average annual increase of 8.4 per cent over the forecast period (2016-17 to 2019-20), the same as last year's projection for the period 2015-16 to 2018-19.

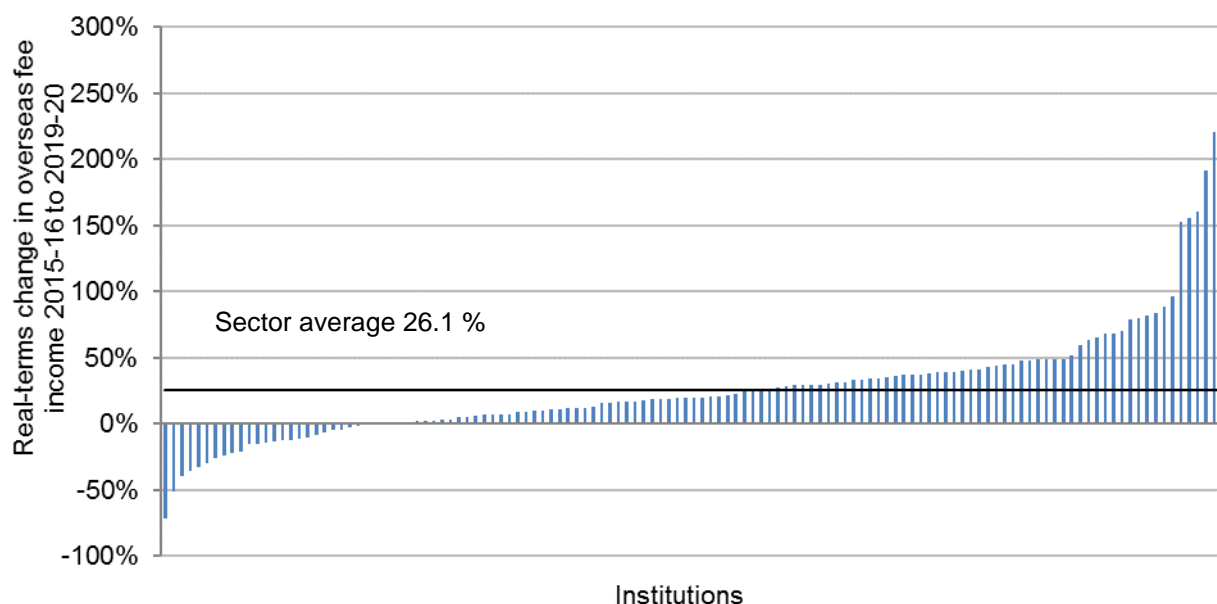
78. Figure 11 highlights the change (and projected change) in student FTEs alongside the change in overseas fee income between 2014-15 and 2019-20. This shows that the sector is projecting overseas fee income to increase by an average 6.0 per annum over the forecast period (2016-17 to 2019-20), compared with student numbers, which are expected to rise by an average of 3.9 per cent per annum over the same period. This indicates that some of the growth in fee income is due to HEIs planning to charge higher fees.

Figure 11: Change in overseas fee income (real terms) and overseas student numbers (FTEs) 2014-15 to 2019-20



79. Figure 12 shows institutions' projected growth in overseas fee income (real-terms) between 2015-16 and 2019-20 and demonstrates the variability of forecasts across the sector. These range from an institution projecting overseas fee income to fall by 71 per cent to another institution projecting growth of 241 per cent.

Figure 12: Change in overseas fee income (real terms) 2015-16 and 2019-20



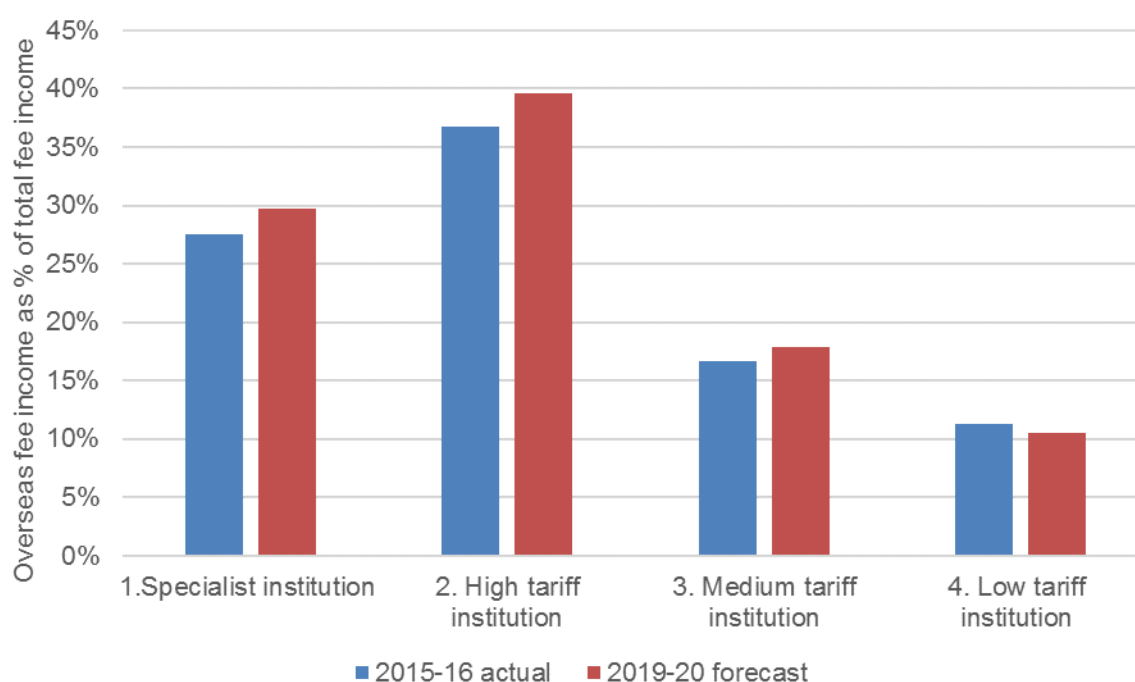
Note: Excludes one outlier.

80. The sector is forecasting an increasing reliance on overseas fee income. In 2015-16 overseas fee income represented 25.4 per cent of total fee income, but this is increasing to 27.7 per cent in 2019-20.

81. Considered in terms of tariff peer groups, high tariff institutions are the most reliant on overseas fee income. For these institutions it represents between 36.7 and 39.6 per cent of total fee income between 2015-16 and 2019-20. Lower tariff institutions are the least reliant and this is decreasing as a percentage of total fee income over the forecast period; for them overseas fee income is forecast to be 10.6 per cent of total fee income by 2019-20.

82. Figure 13 displays the sector's reliance on overseas fee income by tariff grouping in 2015-16 and 2019-20.

Figure 13: Overseas fee income as percentage of total fee income by tariff peer group



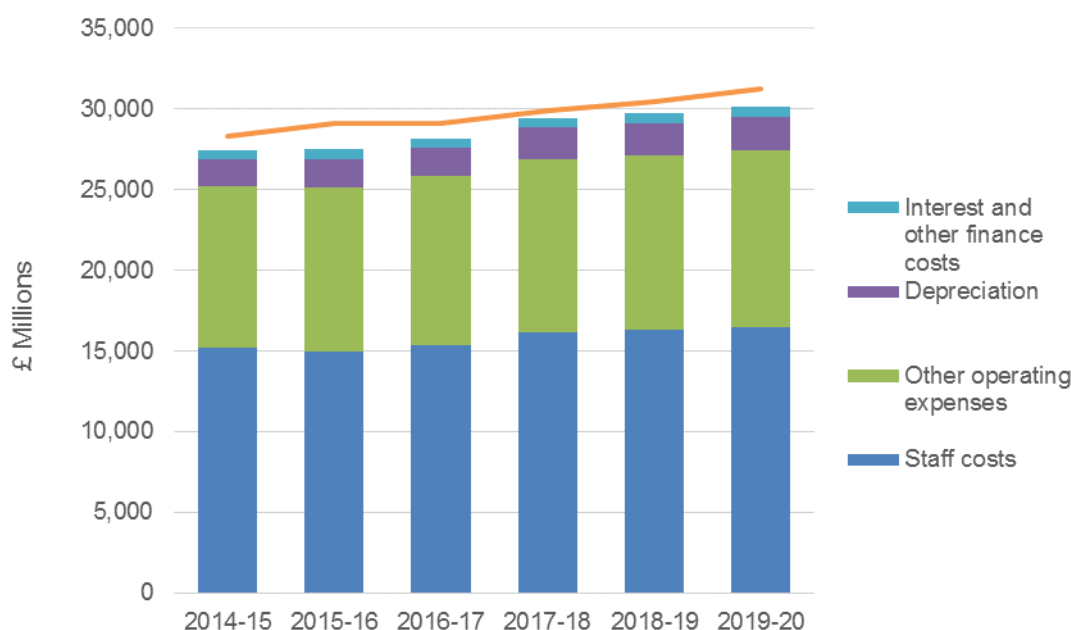
83. Risks to institutions achieving their overseas student growth targets include:

- a. Increasing competition from other countries. For example, the governments of Australia and Canada have introduced new and attractive policies to encourage international students to study in their countries.
- b. Increasing competition between English institutions for overseas students.
- c. The changing demography of the largest source country for the UK's overseas students, China, which is experiencing a decline of 40 per cent in its population of 18- to 24-year-olds, from 176 million to 105 million between 2010 and 2025.

Expenditure

84. Forecasts for 2016-17 show that the sector is projecting total expenditure to rise by 17.2 per cent, from £27,569 million in 2015-16 to £32,312 million by 2019-20, with the largest annual rise of £1,779 million (6.2 per cent) expected in 2017-18. Figure 14 shows the breakdown of projected expenditure (in real terms), alongside projected income for the forecast period.

Figure 14: Forecast expenditure by type 2017-18 (real terms)



85. The sector's largest expenditure is staff costs. The latest forecasts show that the sector expects staff costs to increase by 17.9 per cent (cash terms) over the forecast period, from £14,985 million (equivalent to 51.2 per cent of total income) in 2015-16, to £17,662 million in 2019-20 (52.8 per cent of total income).

86. The largest increase in staff costs is expected to occur in 2017-18, when costs are projected to rise by £1,103 million; an increase of 7.1 per cent. The most significant rises are expected in salary and wages (up £708 million), employer pension costs (up £126 million) and pension provisions (up £186 million). The increase in pension provisions in this year is largely due to a small number of institutions anticipating higher pension costs in response to the latest University Superannuation Scheme (USS) valuation. However, readers should note that the majority of HEIs have indicated that it is too early to make revised pension projections so have not reflected similar increases in their forecasts.

87. Many institutions are also anticipating an increase in staff numbers to support increasing student numbers. At sector level, staff numbers are expected to grow from 294,000 FTE in 2015-16 to 313,000 FTE in 2019-20.

88. The sector is forecasting other operating expenditure to rise from the £10.2 billion reported in 2015-16 to £11.7 billion by 2019-20; an average annual increase of 4.0 per cent over the forecast period.

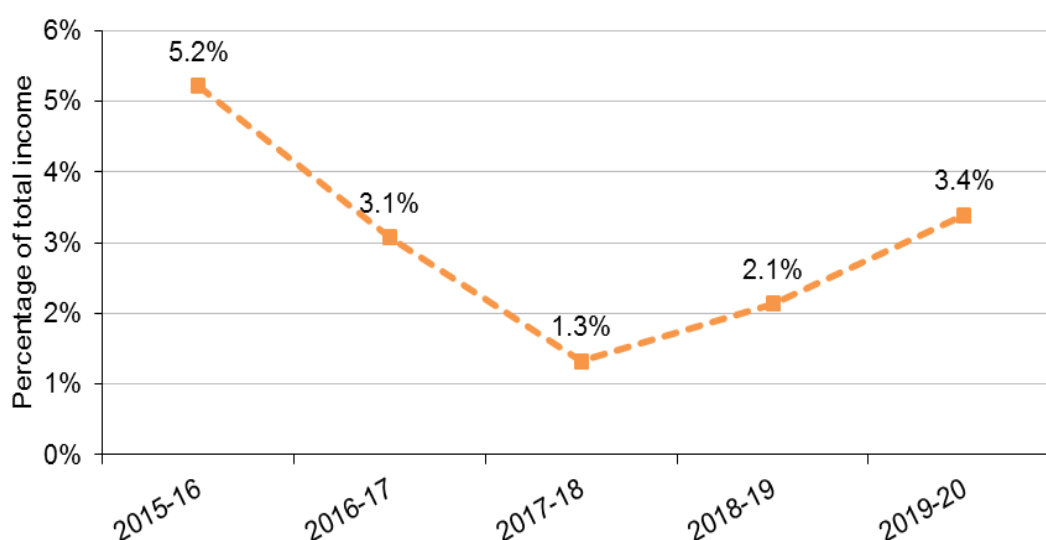
89. Depreciation is expected to rise annually between 4.8 per cent and 9.1 per cent between 2015-16 and 2019-20, reflecting the higher capital estate values held within institutional balance sheets.

Surpluses and cash flow

90. Sector surpluses are projected to be between 1.3 per cent and 3.4 per cent of total income in the forecast period.

91. Figure 15 shows that the sector is expecting to report surpluses of 3.1 per cent of total income in 2016-17 compared with a surplus of 5.2 per cent of total income in 2015-16. Thereafter, surpluses are expected to fall to 1.3 per cent of income in 2017-18, before rising to 2.1 per cent of income in 2018-19 and 3.4 per cent of income in 2019-20. These are relatively small margins in which to operate, and mean that even small changes in income or costs could have a material impact on the financial performance of institutions and the sector.

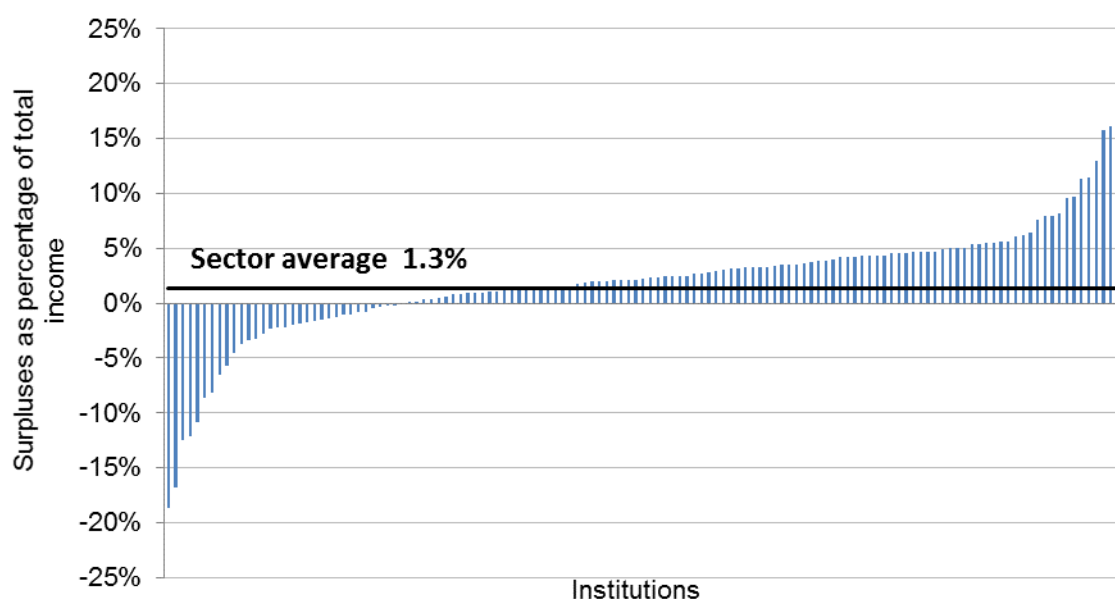
Figure 15: Sector surpluses 2015-16 to 2019-20



92. Although sector surplus levels are low overall, the range of surpluses forecast by HEIs across the sector is expected to be much wider in the forecast period than previously reported. At an institutional level, these range from a deficit of 18.6 per cent of income in 2017-18 to a surplus of 58.1 per cent of income in 2019-20 (arising from a significant increase in donations and endowments projected by this particular HEI in that year).

93. The sector is forecasting its lowest surplus in 2017-18. Figure 16 highlights deficits and surpluses at an institutional level, as a percentage of total income for 2017-18.

Figure 16: Forecast surpluses as a percentage of total income 2017-18



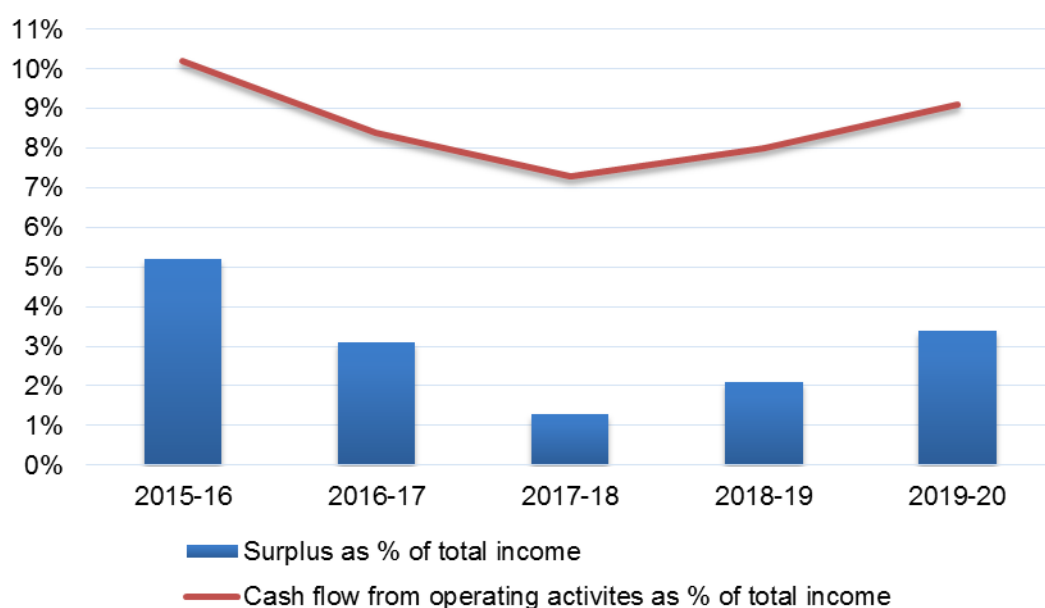
94. Cash flow from operating activities is expected to be 8.4 per cent of total income in 2016-17 before falling to 7.3 per cent in 2017-18. This is then projected to rise to 8.0 per cent in 2018-19 and 9.1 per cent in 2019-20. It is not, however, forecast to reach 2015-16 levels of 10.2 per cent across the forecast period.

95. As with surpluses, the range of cash flows varies considerably across the sector in the forecast period. In 2017-18, these range from a negative cash flow projection of 17.7 per cent of income to a positive cash flow projection of 20.9 per cent of income.

96. In 2016-17 12 institutions are expecting to report negative cash flows (compared with seven institutions in 2015-16). This number is expected to drop to 10 in 2017-18 and fall to six by 2019-20.

97. Figure 17 shows forecast levels of surplus, together with the forecast levels of cash flow from operating activities (each as a percentage of total income). This shows that both surplus and cash flow are expected to fall between 2015-16 to 2017-18 before rising again in 2018-19 and 2019-20.

Figure 17: Surplus and cash flow (as percentages of total income), 2015-16 to 2019-20

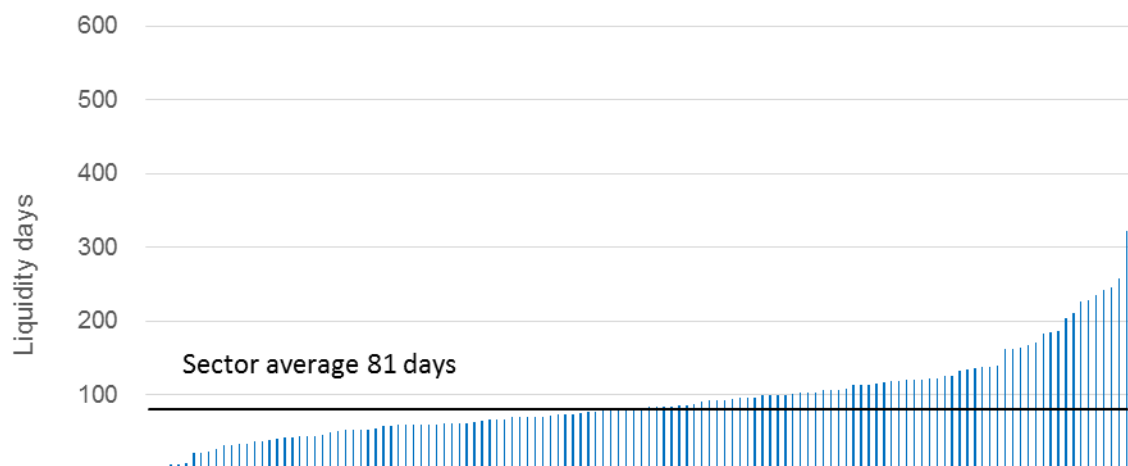


Liquidity

98. At the end of 2015-16 the sector had net liquidity of £9,581 million, sufficient to cover 135 days' expenditure. This is projected to fall to 128 days by 31 July 2017, before falling further in the remainder of the forecast period, to 81 days by the end of 2019-20. While liquidity is forecast to reduce, the sector expects to hold higher levels of liquidity for the period ending 31 July 2017 to 31 July 2018 compared with last year's projections.

99. As with other financial indicators, there is much variation in the number of liquidity days reported across the sector. Figure 18 shows the number of liquidity days reported by institutions at 31 July 2016, compared to the number of projected liquidity days at 31 July 2020.

Figure 18: Forecast liquidity days at 31 July 2020



100. The liquidity data is taken as a snapshot of bank and investment balances, as at 31 July. The main period of capital spending at most institutions happens during the summer months, after 31 July; therefore the available cash, not committed to future capital spending, is likely to be much lower.

101. Six institutions are expecting to report liquidity of less than 20 days in the period 2016-17 to 2018-19, dropping to five institutions by 2019-20 (compared with three HEIs in 2015-16) – although, in our view, the risk of solvency problems in the sector remains low.

102. As charities, HEIs are obliged to ensure that they do not expose themselves to undue risk. Strong liquidity is particularly important given current levels of uncertainty and risk in the sector and, as part of our accountability process, we continue to monitor liquidity levels, to assess whether HEIs are able to maintain sufficient cash levels to manage their risks effectively.

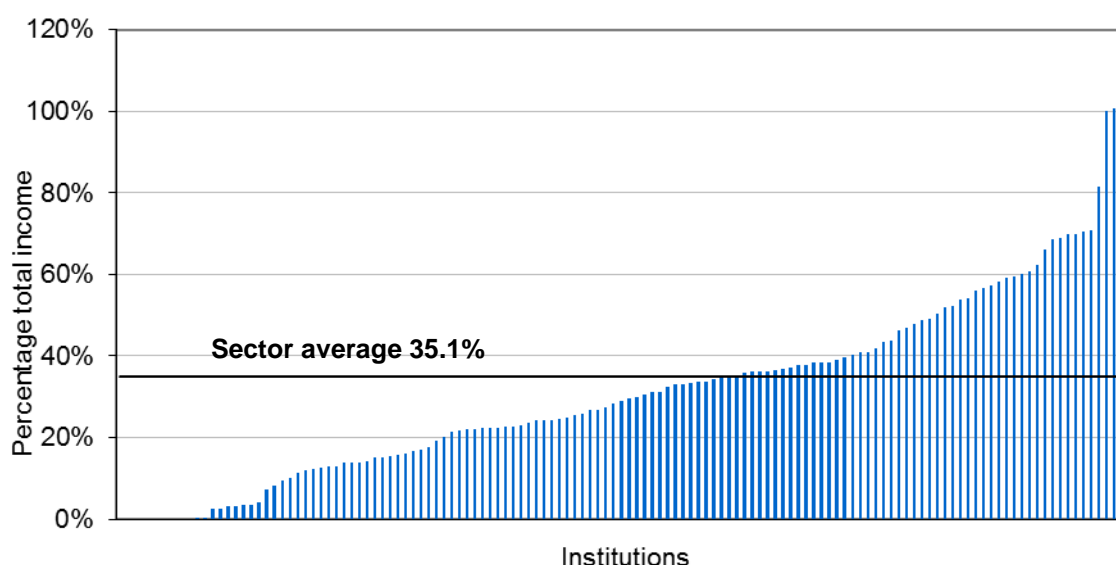
Borrowing

103. The average level of borrowing has been rising in the sector for some time. In 2001-02, the level of borrowing was 19.6 per cent of total income, but by the end of 2015-16 this had risen to 30.7 per cent.

104. Forecasts show that the sector is projecting borrowing to continue to rise from £8.9 billion at the end of 2015-16 to £11.7 billion by the end of 2019-20. Compared with total income, sector borrowing levels are projected to reach 36.8 per cent by the end of 2018-19, before falling to 35.1 per cent by the end of 2019-20.

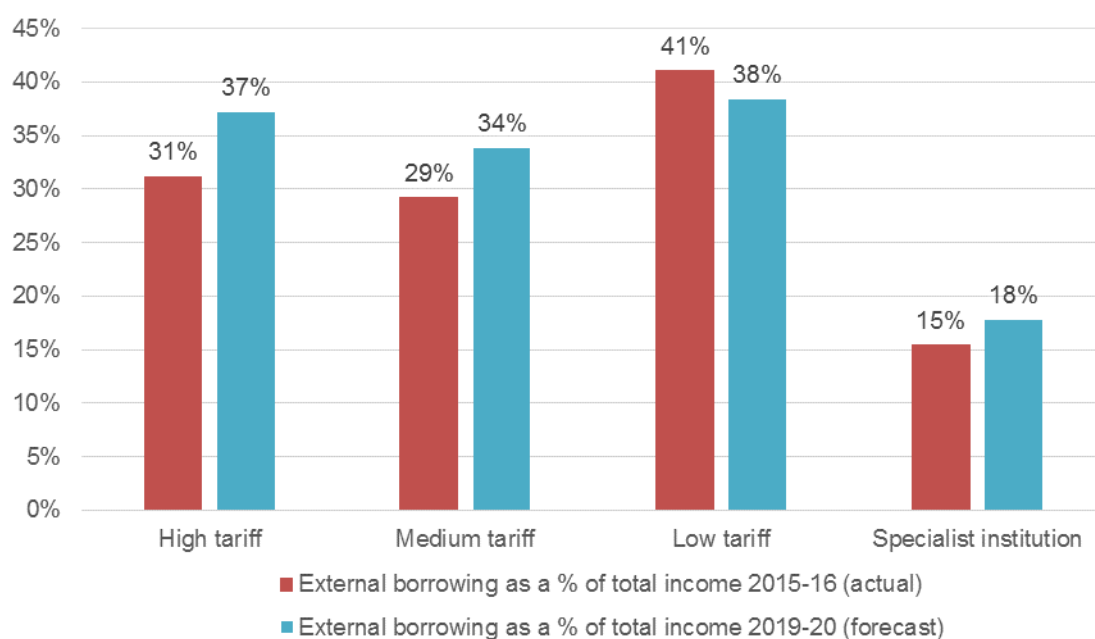
105. Figure 19 shows the forecast level of external borrowing as a percentage of total income as at 31 July 2020.

Figure 19: Forecast external borrowing as a percentage of total income 2019-20



Note: Excludes one outlier.

Figure 20: Forecast external borrowing as a percentage of total income (by tariff group)



106. At a tariff peer group level, as Figure 20 shows, there is a variation in the size of borrowing relative to overall financial size, measured as a proportion of total income generation (gearing measure). High-tariff institutions make up the greatest proportion of borrowing in the sector by financial value and as a result this group has significant influence over the figures at sector level. They also have the largest relative growth in this gearing measure. The low-tariff group of institutions are the highest-g geared as at July 2016, with borrowing at 41 per cent of income. However, over the forecast period the low-tariff group institutions expect gearing to reduce.

107. The availability of borrowing has not been a difficult issue for the sector over recent years, and the sector expects this to continue over the forecast period. The sector continues to look at different options for financial investment, including private and public bonds for larger and longer-term borrowing.

108. Interest rates overall remain low, which partly reflects the confidence of lenders to the sector. However, as readers would expect, lenders are taking a great interest in the current sector-level reforms and how these might impact on individual institutions.

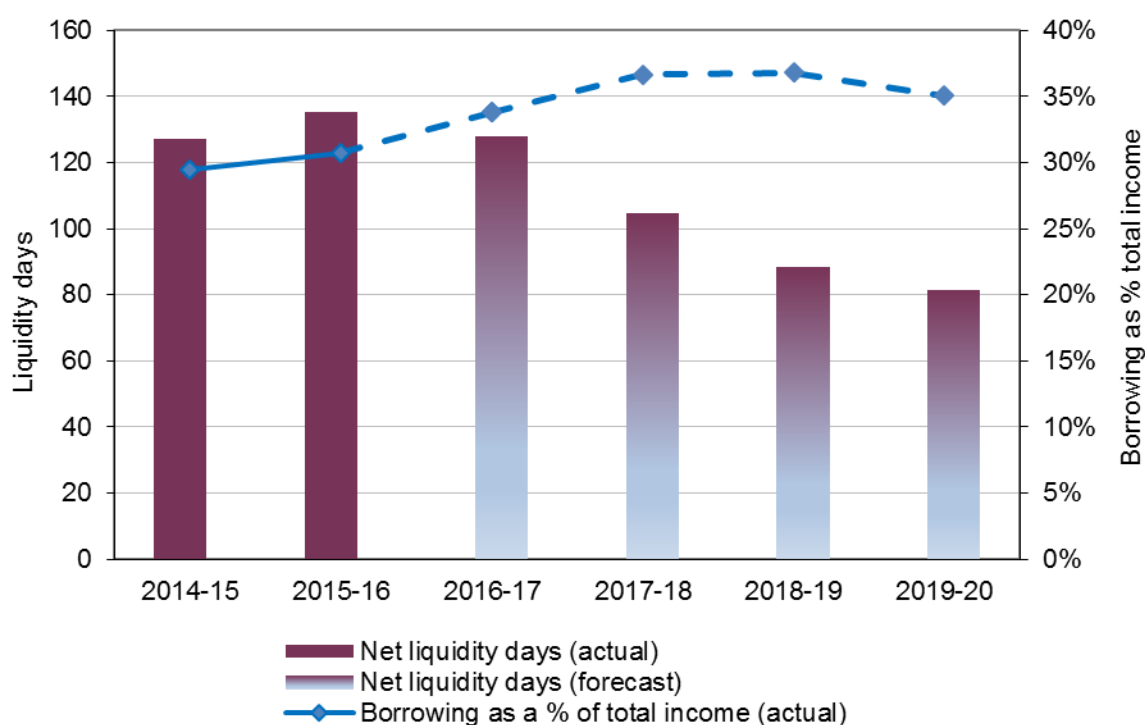
109. As borrowing rises in the sector, interest payments are expected to increase. The increase in payments to service borrowing costs (interest and capital payments) will continue to be affordable as long as income and cash projections are as currently forecast. However, a rise in 'fixed, financial commitment costs' could put pressure on any institution that fails to constrain other costs or to increase income.

110. The primary responsibility for assessing the affordability of, and risks around, financial commitments rests with HEIs' governing bodies. However, HEFCE also plays a role in assessing whether any financial commitments entered into by an HEI present challenges to the HEI's long-term sustainability that could impact adversely public investment in that HEI, become a call on public funds, or adversely affect the collective student interest. For this reason, an institution must get written permission from HEFCE before it agrees to any new financial commitments

which would cause its total financial commitments to exceed the threshold (based on adjusted operating cash flow) set out in the 'Memorandum of assurance and accountability between HEFCE and institutions' (HEFCE 2017/08)⁵.

111. Figure 21 shows forecast levels of net liquidity (expressed as liquidity days), together with the forecast levels of borrowing (as a percentage of total income). This shows a reduction in sector liquidity levels over the forecast period, combined with much higher levels of borrowing.

Figure 21: Net liquidity and borrowing 2014-15 to 2019-20

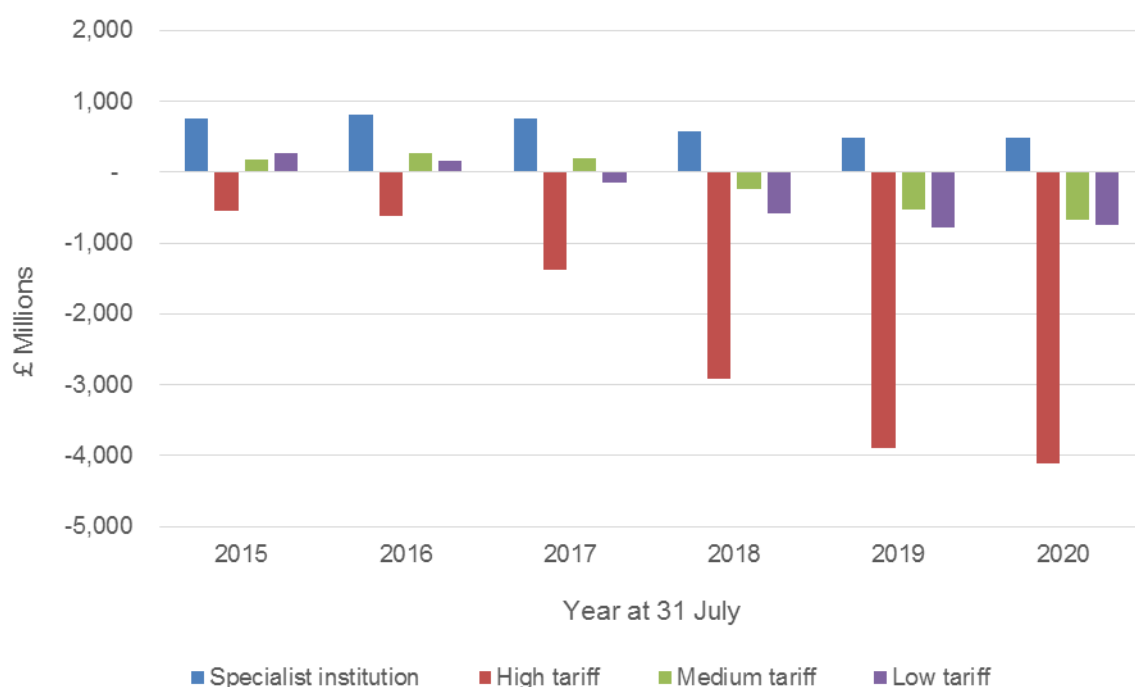


112. Earlier forecasts showed that the sector expected to enter a period of growing net debt (where borrowing exceeds liquidity) by the end of 31 July 2017. At this point, the sector is expecting its net debt to be £577 million before rising to £5 billion at 31 July 2020.

113. Figure 22 shows the varying picture across the tariff peer groups. This shows that all peer groups, with the exception of specialist institutions, are forecasting a net debt by the end of the forecast period, with the high-tariff group expecting to increase net debt significantly, from £551 million at 31 July 2016 to over £4 billion by 31 July 2020.

⁵ Available online at www.hefce.ac.uk/pubs/year/2017/201708/.

Figure 22: Net funds and debt, 2015-16 to 2019-20



114. The trend in recent years of high rates of increased borrowing and reducing liquidity is clearly unsustainable in the long term. However as reported in paragraphs 103 to 105, while borrowing is expected to grow over the forecast period, the data shows that borrowing and gearing will reduce in the final year of the forecast.

Capital expenditure

115. Since 2006 the sector has spent £27.9 billion on improving its physical infrastructure, excluding expenditure on general day-to-day maintenance.

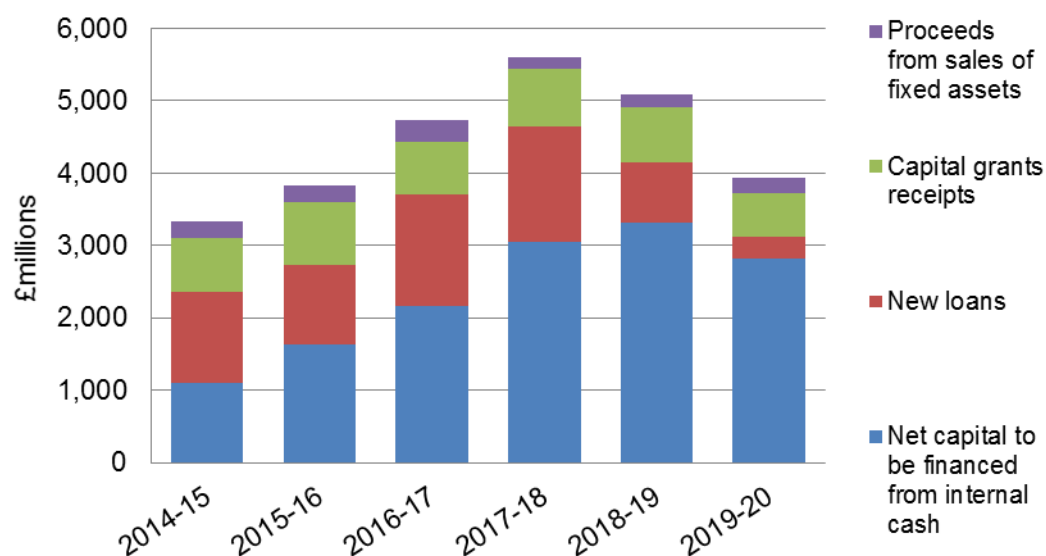
116. Despite this, estate management statistics data as at 31 July 2016 showed that the sector still needed to invest £3.6 billion to bring its non-residential estate up to a sound and operationally safe condition. This cost reflects the investment required to restore the estate to a sound baseline condition, and is not the same as the investment required to bring the estate up to the standard required to satisfy rising student expectations. This latter investment is essential for enabling HEIs to compete in the increasingly competitive global market.

117. These latest forecasts show that the sector is expecting to increase investment in its estate significantly, with projections showing capital expenditure in excess of £19.4 billion (2016-17 and 2019-20). This is equivalent to an average of £4,842 million per annum; a 48 per cent rise on the previous four-year average, which was £3,269 million (2012-13 to 2015-16). However, nearly a quarter of HEIs in the sector are forecasting lower capital expenditure over the forecast period.

118. The latest projections show that the sector is expecting to use £11.3 billion from its own cash reserves (equivalent to 9.0 per cent of total income) and to borrow an additional £4.3 billion to help fund its capital investment plans in the forecast period.

119. Figure 23 provides an indication of how the sector expects to fund capital expenditure over the forecast period. This shows the largest capital investment is expected in 2017-18, totalling £5,593 million, with the increase in investment funded primarily through its own cash reserves.

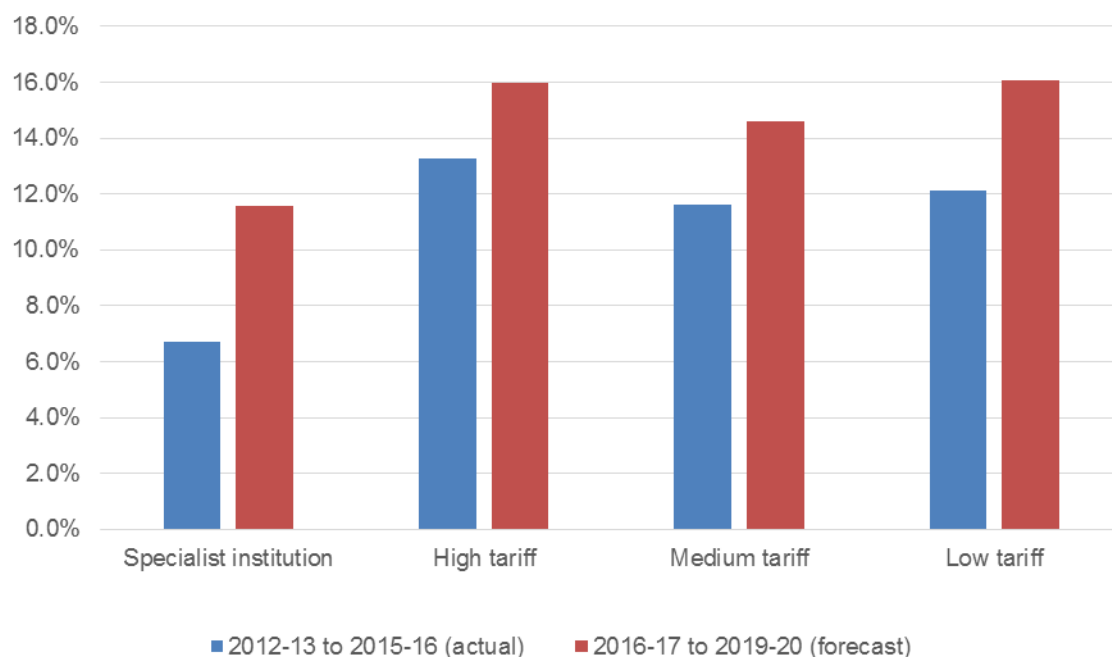
Figure 23: Capital expenditure funding projections 2016-17 to 2019-20



120. Despite the increase in capital expenditure in all tariff groups, forecasts show that just over a quarter of HEIs in the sector are planning to reduce capital expenditure over the forecast period. By contrast 18 institutions are planning capital expenditure that accounts for half of the sector's total.

121. Figure 24 shows how capital expenditure plans vary across the tariff peer groups. In particular, it shows capital expenditure as a percentage of total income for the past four years (2012-13 to 2015-16) compared with forecast capital expenditure as a percentage of projected income for the forecast period (2016-17 to 2019-20).

Figure 24: Capital expenditure as a percentage of total income 2012-13 to 2015-16 (actual and 2016-17 to 2019-20 (forecast)



122. Cash inflows from operating activities projected by the sector for 2016-17 are sufficient to finance any expenditure plans not financed by capital grants or borrowings. However, expenditure projections in the following two years will require close cash flow management, as forecasts indicate that the sector requires another £1.5 billion from its own cash reserves (in excess of the projected surpluses and cash inflows) to fund the capital expenditure shortfall for those years. In the absence of alternative financing, this will result in the sector's projected cash levels falling further.

123. It is also important to recognise that the forecasts assume that the capital markets continue to have confidence in the sector, which depends on their risk assessment of the sector and individual HEIs.

124. Strong surpluses and liquidity help to mitigate risks and raise confidence levels. However, the growing uncertainties faced by the sector as a result of the UK's decision to leave the EU, coinciding with increasing competition in the global higher education market, will lead to a greater focus from investors on the underlying financial strength of HEIs. Consequently, any fall in confidence levels could restrict the availability of finance in the sector and put significant elements of the investment programme at risk. Falling confidence levels could also lead to a rise in the costs of borrowing.

125. With significantly reduced levels of publicly funded capital grants, HEIs will need to generate surpluses and operating cash inflows to sustain the level of capital investment needed to attract students and staff, and ensure their long-term sustainability. In the short term this level of capital investment is affordable given the cash reserves held by the sector; however, the sector will be unable to sustain it unless institutions generate increased surpluses. A reduction in capital investment could lead to significant under-investment in the sector, with institutions that

fail to invest sufficiently in infrastructure finding themselves in a weaker market position and at higher risk of financial instability from reduced recruitment.

Reserves and pension deficits

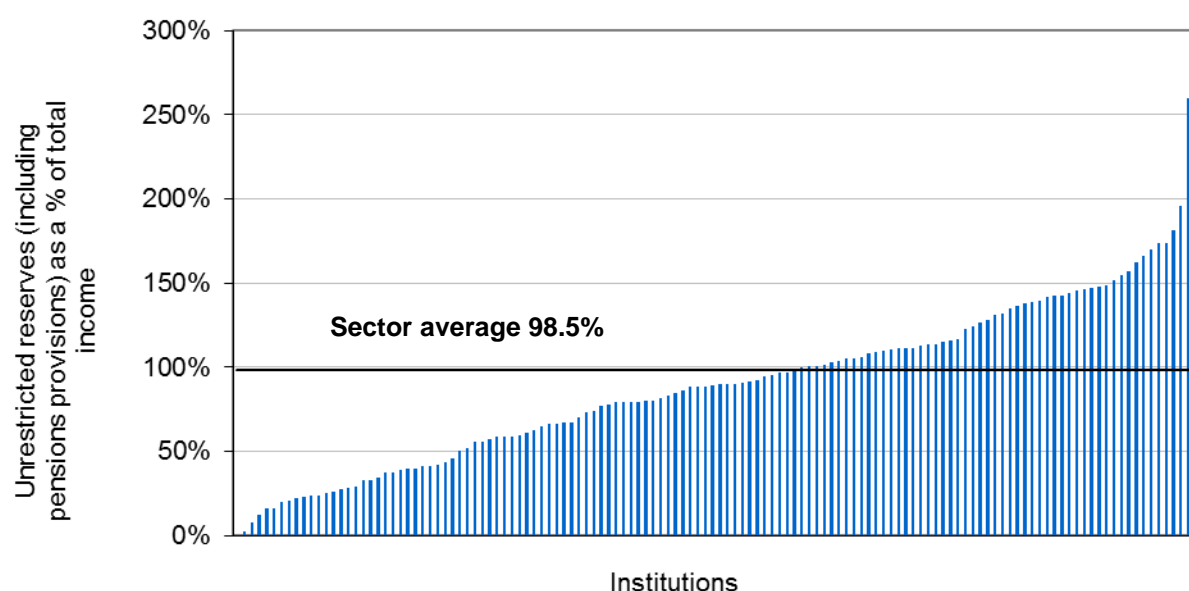
126. Reserves are an HEI's total assets less its liabilities and, in very broad terms, can be used as a proxy for the overall value of an institution. These are represented by the accumulated surpluses of an institution over its lifetime, reinvested to increase its assets and operations. Reserves are not the same as cash, although an institution could dispose of an asset if it was surplus to operational requirements (thereby converting it to cash).

127. Under the new financial reporting framework, reserves are categorised as either restricted or unrestricted. Unrestricted income and expenditure reserves represent the institution's accumulated value through surpluses reported in an HEI's income statement, where there are no restrictions on the use of funds, as well as an HEI's revaluation reserves.

128. After taking into account pension liabilities, the sector reported unrestricted reserves of £28.5 billion, equivalent to 98.1 per cent of total income at the end of July 2016. These are expected to rise to £33.0 billion by the end of July 2020 (to 98.5 per cent of income), although the aggregate sector position masks a significant spread of values and a concentration of large unrestricted reserves in a small number of institutions, with half of the sector's reserves held by 15 institutions.

129. Unrestricted reserves as a percentage of total income also varied considerably at an institutional level. Figure 25 shows the level of unrestricted reserves, after deducting pension liabilities, as a percentage of total income in 2015-16. This shows results ranging from 0 per cent to 524 per cent at 31 July 2020.

Figure 25: Forecast unrestricted reserves including pension liabilities as a percentage of total income 2019-20



Note: Excludes one outlier.

130. Pension liabilities are forecast to increase from £9.5 billion at 31 July 16 to £10.1 billion at 31 July 2020; an increase of 6.7 per cent. There are various assumptions made across the institutional landscape about liabilities and the likely implications for institutional expenditure.

131. The sector's largest multi-employer pension scheme is the Universities Superannuation Scheme (USS), with the great majority of current staff working in HEIs that existed before 1992 being members of this scheme. Overall, 90 HEIs contribute to the USS, with employer contributions representing approximately 60 per cent of total contributions to the sector's pension schemes.

132. The triennial valuation of the USS as at 31 March 2017 is underway. This process involves a consultation on the assumptions for the scheme's technical provisions. A complex mix of factors is contributing to the growing deficits for the sector's defined benefit schemes, not least the prevailing economic conditions and the performance of asset investments.

133. It would not be appropriate to comment on the USS position until the valuation outcome is finalised and the likely financial implications become clear.

134. The financial forecasts report that pension provisions are expected to increase by £300 million in 2017-18. This is largely due to a small number of institutions anticipating higher pension costs following the USS scheme valuation updates. The majority of HEIs have indicated that it is too early to make revised pension projections at this stage in the USS valuation process. It is therefore possible that the sector may incur costs in excess of its forecast, which will require management. This therefore represents a risk to institutional financial performance.

135. The revaluation of the Local Government Pension Schemes as at March 2016 shows a mixed picture. The scheme is operated by regional funds, which are administered locally. Employer contribution rates are partly dependent on assessments of the covenants of individual employers. As with the USS scheme, there is a risk that institutions may incur increased employer contribution rates beyond those currently forecast.

136. While the financial implications of defined contribution schemes may be more certain for employers, these are not without risk as institutions will want to ensure they meet scheme objectives and provide appropriate value to staff.

Disclaimer

137. This report, which is based on information provided by HEFCE-funded higher education institutions, has been prepared for the benefit of HEIs and their stakeholders in general terms. HEFCE cannot reasonably foresee the various specific uses that may be made of this report, and therefore no responsibility is accepted for any reliance any third party may place upon it.

List of abbreviations

EU	European Union
FRS	Financial Reporting Standard
FT	Full-time
FTE	Full-time equivalent or equivalence
HEFCE	Higher Education Funding Council for England
HEI	Higher education institution
OfS	Office for Students
PGR	Postgraduate research
PGT	Postgraduate taught
RCUK	Research Councils UK
RDEC	Research and Development Expenditure Credit
UG	Undergraduate
UKRI	UK Research and Innovation
USS	Universities Superannuation Scheme