IN FOCUS Universities UK

PATTERNS AND TRENDS

IN UK HIGHER EDUCATION

2014

In collaboration with

Universities UK

HESA
HIGHER EDUCATION STATISTICS AGENCY

Contents

List of figures and tables

Figures

Tables

Foreword

The *Patterns and trends* series presents annual statistical data about the sector in the context of the trends of the previous decade. The picture presented by this year's report, which focuses on academic year 2012–13, is of a sector at the beginning of a significant period of change. 2012–13 was the first year of the new undergraduate funding regime, which in part contributed to a decline of 6.3% in student enrolment. While growth is expected to return after 2012–13, this dip illustrates the ongoing need for the sector to demonstrate its value to prospective students.

This year's report shows that the UK's international market share increased from 10.7% in the year 2000 to 12.6% in 2012. However, international higher education is an increasingly competitive market, and the governments of the UK's competitor countries are implementing bold strategies and policies, backed by investment, in an attempt to attract more international students.[1] The decline in numbers studying part time has continued, as has the recent reversal of the growth in postgraduate taught study that happened over the past decade, with a 7% drop in postgraduate taught numbers between 2011–12 and 2012–13.

The decline in mature students has resulted in a younger student population. This shift is notable in postgraduate study, where 32% of students are now under 25 years old. Variations in the gender balance in different subjects also persist and need to be given careful consideration if the sector is to continue to produce a balanced graduate population.

The higher education sector continues to make a crucial contribution to the UK's development as a world-leading advanced economy. Over 50% of those in employment aged between 30 and 39 now have a higher education qualification, an increase of nearly 20 percentage points since 2003. In difficult conditions graduates continue to experience better outcomes than non-graduates in both lifetime earnings and employability. The sector's economic contribution is further demonstrated by the continued growth of knowledge exchange income to £3.6 billion, a real terms increase of 45% since 2003–04.

This year's report also highlights some important gaps in our understanding of an evolving sector. The growth in alternative providers is likely to continue, particularly as more providers develop the track records necessary to apply for their own degree awarding powers. It is increasingly important that course and enrolment data is collected from these providers, as part of the HESA returns process.

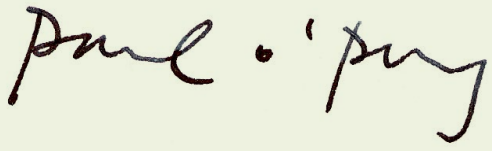
Similarly, growing interest in massive open online courses (MOOCs) highlights the need for effective ways of recording the changing role of technology-enhanced learning. Currently HESA recording of online learning relies on using distance learning as a proxy. However, as the Online Learning Consortium surveys of the United States illustrate, online learning is an integrated part of the learning and teaching experience across all types of courses.

2012–13 also saw a 3.9% decrease in Scottish students entering institutions in England. The future impact of diverging funding regimes will need to be tracked, particularly if further powers are devolved to Scotland. The importance of the relationship with Europe to the sector is demonstrated by the continued growth in research funding to £690 million, up from £221 million in 2003–04.

The overall financial picture is relatively positive. The sector returned a surplus of £1.23 billion in 2012–13, 4.2% of turnover, but there are variations at institutional level. The replacement of grant-based funding with tuition fees, and the significant reduction in dedicated capital funding, has made it essential for institutions to build resilience and establish funds for reinvestment. As the legacy of the old funding system unwinds, and the realities of a competitive funding system bed in, a more sophisticated perspective on the financial returns reported by the sector will be required.

The data presented here is one part of a complex picture driven by many interacting factors. Further detailed investigations of changes in the sector have been published by Universities UK over the course of 2014 as part of its *Funding environment for universities 2014* series.[2]

This report focuses on the national picture. An online annexe (available on the Universities UK website, www.universitiesuk.ac.uk) presents information on the diversity of UK higher education institutions and their students, staff and income.



Professor Paul O'Prey
Vice-Chancellor, University of Roehampton
Chair, Universities UK Longer Term Strategy Network

1. Universities UK (2014) *International students in higher education: the UK and its competition*
2. *The funding environment for Universities 2014 – Trends in undergraduate recruitment*; *Postgraduate taught education: The funding challenge*; *Research and postgraduate research training*; *International students in UK higher education: the UK and its competition*; *The impact of initial teacher training reforms on English higher education institutions* (all UUK, 2014)

Introduction

This report describes recent patterns and trends in UK higher education up to the academic year 2012–13. Most of the data has been provided by the Higher Education Statistics Agency (HESA). This data, collected after the end of each academic year, provides a rich source of information on the students, staff and finances of the UK's higher education sector.

The end of the period covered in this report is marked by significant change for institutions, including ongoing transition to a new undergraduate funding system, reductions in public funding for higher education, and the impact of the economic downturn. As the last year covered in this report was the first year of the new tuition fee regime, the picture of the impact of that change is limited – its effects will become more apparent over the next few years. This report aims to aid our understanding of changes in UK higher education by presenting time series data for a range of key measures.

Supplementing this report's analysis, an online annexe (available at www.universitiesuk.ac.uk /highereducation/Pages/PatternsAndTrendsIn UKHigherEducation2014) presents 37 institutional graphs on student population, staff and finance. These show, for example, the percentage of part-time students, the percentage of mature full-time undergraduate students, the percentage of UK-domiciled first year ethnic minority students, the percentage of female academic staff, surplus/deficit as a percentage of income, research grants and contracts as a percentage of funding council research grant, and income from non-EU student fees by institution. These graphs show the great diversity of the UK higher education sector.

As an example, Figure 1 gives the proportion of income from recurrent teaching grant and UK and EU undergraduate fees in 2012–13, by institution. It illustrates the diversity of the sector's income from undergraduate teaching, which is important to note as the new competitive funding system beds in and proposals for regulatory reform are developed.

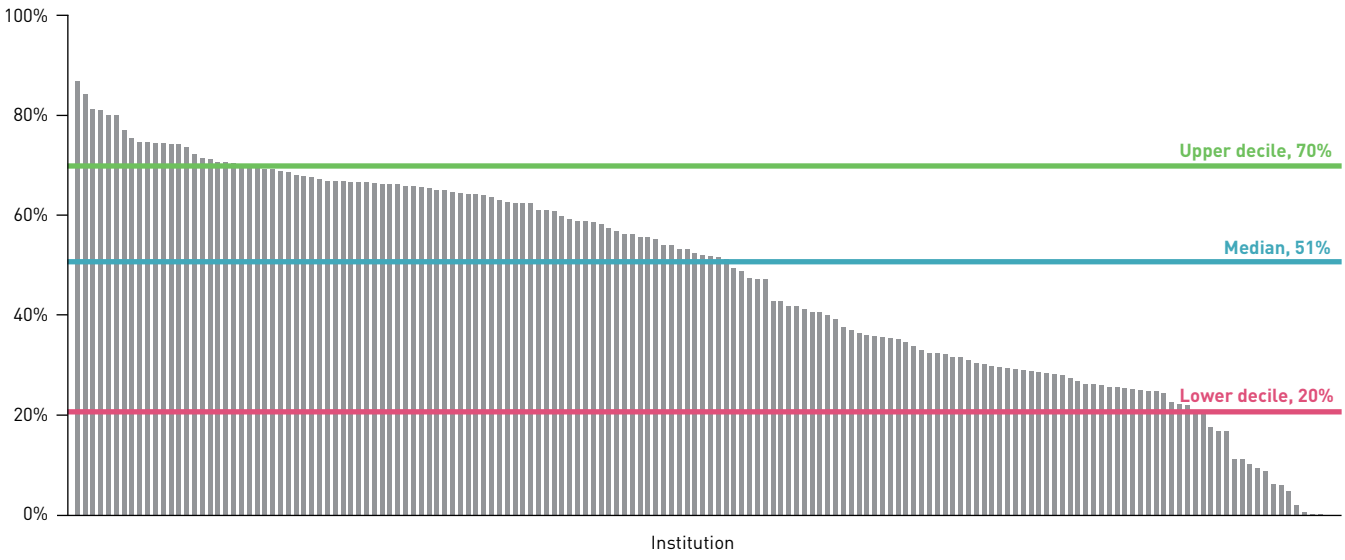
Note on data

In 2012–13 there were 162 higher education institutions in the UK. This report features data on all these institutions, all of which are in receipt of public funding from the funding councils, other than the University of Buckingham. This excludes data for the University of Wales (central functions), which has staff but no students.

All HESA figures quoted in the report which relate to student and staff numbers have been rounded to the nearest five in accordance with HESA data protection protocols. All percentages have been calculated using the raw figures and rounded, therefore rounded figures may not sum precisely. The data on which the charts in this report are based is available to download from Universities UK website at:

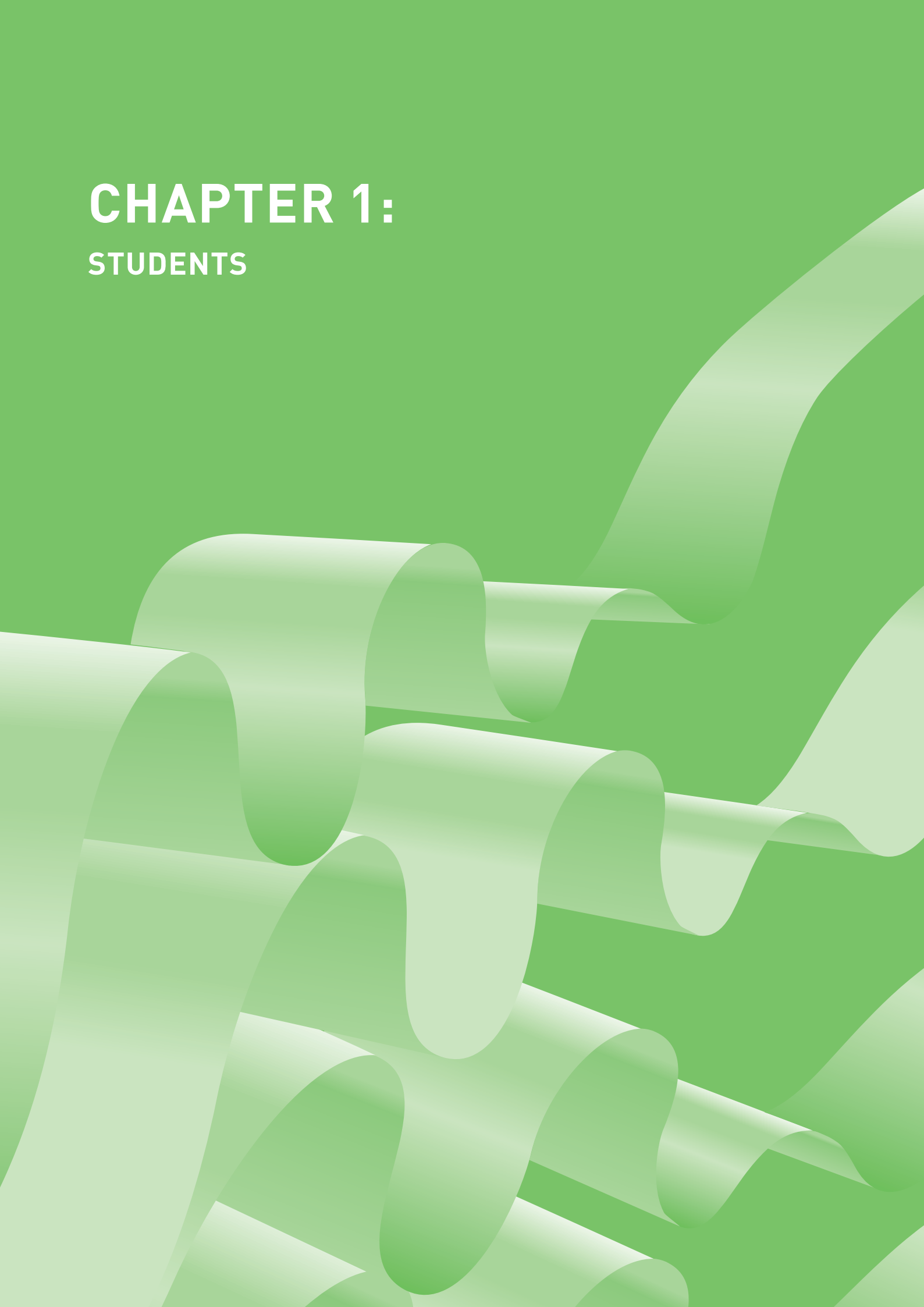
www.universitiesuk.ac.uk/highereducation/Pages/PatternsAndTrendsInUKHigherEducation2014.aspx

Figure 1: Proportion of income from recurrent teaching grant and UK and EU undergraduate fees by institution, 2012–13



Source: HESA

CHAPTER 1:
STUDENTS

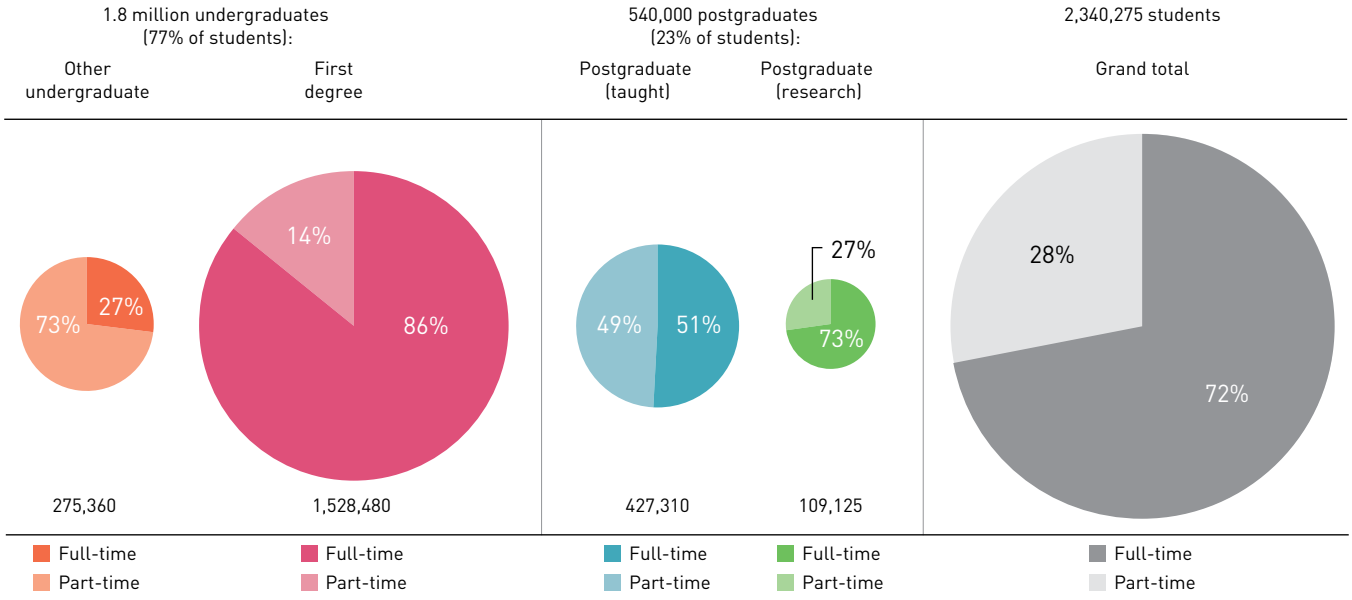


1.1 Higher education students in the UK

There were around 2.3 million students registered to study at the UK's 162 higher education institutions in 2012–13. As Figure 2 shows, undergraduates can be divided into two groups: those studying first degrees (over 1.5 million students) and those studying other undergraduate degrees (275,000 students). The latter group includes students studying towards qualifications such as foundation degrees, higher national certificates, and higher national diplomas. Figure 2 also shows that postgraduates made up a significant proportion of the total student population, with nearly 430,000 studying towards taught degrees and over 100,000 studying at postgraduate research level. While 86% of first degree students and 73% of postgraduate research students are studying full time, only 27% of other undergraduate students and 51% of postgraduate taught students do so.

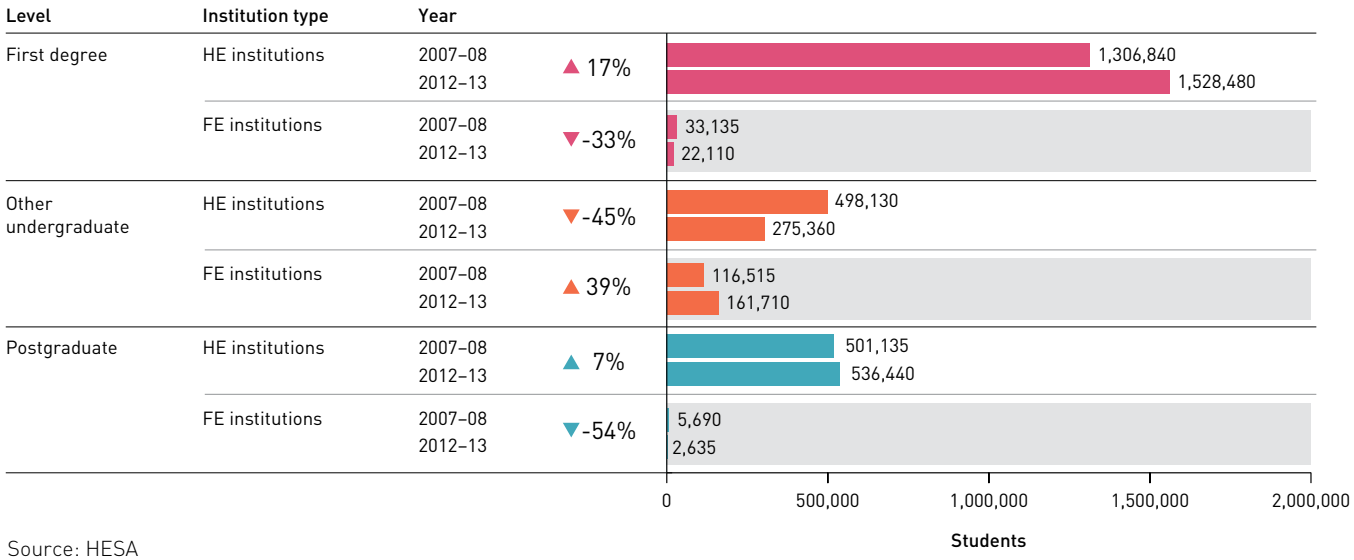
These 2.3 million students study either at their home institution or with a partner organisation such as a further education college or another provider. In addition, there were 186,000 students registered directly with a further education institution to study a higher education qualification. There have been contrasting trends in student numbers by level of study (Figure 3). The number of other undergraduates registered at further education institutions grew between 2007–08 and 2012–13, but the number of first degree students and postgraduates fell. The pattern

Figure 2: Students at UK higher education institutions, 2012–13



Source: HESA

Figure 3: Higher education students by institution type and level of study, 2007–08 and 2012–13



Source: HESA

reverses at higher education institutions: other undergraduate numbers were down, but first degree and postgraduate student numbers were up. Between 2011–12 and 2012–13, the only groups that increased were first degrees and other undergraduates at further education institutions.

Higher education is also delivered by a range of alternative providers not in receipt of funding from the Higher Education Funding Council for England (HEFCE). Data on these providers is more limited, and is not included in analysis presented in this report. However, Box 1 provides brief comment on recent changes in this sector.

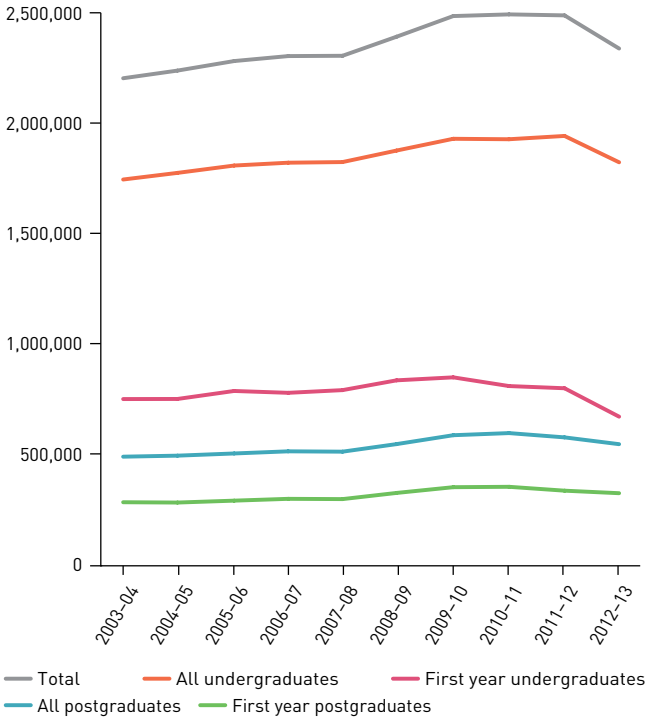
This report focuses on higher education provision in the UK. However, it is also relevant to note the involvement of the UK higher education sector in transnational education. In 2012–13, there were 598,925 students studying outside the UK who were either registered with a UK higher education institution, or registered with a partner organisation abroad and working towards a qualification awarded by a UK higher education institution.[3]

The rest of this report focuses solely on higher education provision delivered by higher education institutions in the UK. Therefore data for the other types of higher education provision noted in Box 1 is not included in the rest of the figures presented here.

1.2 The total number of students at higher education institutions

In 2012–13 there were 140,000 more students studying at UK higher education institutions than in 2003–04, an increase of 6.4%. However, the rate of change fluctuated across the period: 2009–10 saw the largest year-on-year increase, of 4.1%; between 2009–10 and 2011–12 numbers remained stable at around 2.5 million; and then in 2012–13 numbers decreased by 6.3% (156,000 students). First year undergraduate student numbers increased by 13.7% from 2003–04 to 2009–10, followed by a 22% decrease between 2009–10 and 2012–13. Numbers of first year postgraduate students increased by

Figure 4: Total number of students by level of study, first year undergraduates and first year postgraduates, 2003–04 to 2012–13



Source: HESA

Box 1:
Alternative providers

As with the HEFCE-funded sector, the funding regime for providers not in receipt of HEFCE funding, known as alternative providers, also changed for 2012–13. Students enrolled at institutions with specifically designated courses can now receive tuition loans of up to £6,000 per year as well as maintenance loans. Some alternative providers, such as the University of Buckingham, BPP and Regent's University London, have their own degree awarding powers. However, these are the exception rather than the rule: providers typically offer degrees validated by HEFCE-funded institutions, or Edexcel HND and HNC qualifications.
As alternative providers do not submit returns to HESA, data on students enrolled at these institutions is very limited. Nevertheless, the recent growth of alternative providers is evident from student support statistics on the number of loans issued to students enrolled at them. For 2012–13, 29,200 tuition loans were issued to alternative providers, an increase from 9,800 for the previous year. However, these figures do not include UK and EU students who may not be eligible for student support, as well as non-EU students.

3. HESA Aggregate Offshore Student Record (2012–13)

21% between 2007–08 and 2010–11 and then declined by 9% between 2010–11 and 2012–13.

1.3 Changes in modes and levels of study

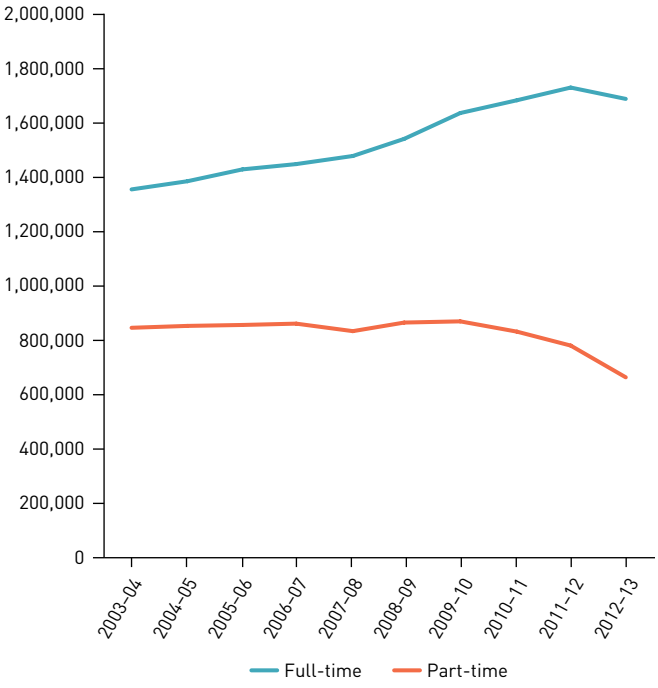
There were different trends for different modes and levels of study between 2003–04 and 2012–13 (Figure 5 and Figure 7). At an aggregate level, full-time provision grew by 26% from 2003–04 to 2011–12 and declined by 2% from 2011–12 to 2012–13. Part-time provision increased slightly, by 3%, between 2003–04 and 2009–10 and then shrunk by 24% between 2009–10 and 2012–13. As a result, the proportion of students studying full time increased, from 62% in 2003–04 to 72% in 2012–13.

The Higher Education Students Early Statistics Survey (HESES) provides an early indication of student numbers in England in the current academic year. HESES data suggests that in 2013–14, part-time entrants to higher education institutions in England are 47.8% below levels seen in 2010–11. Key factors identified by institutions as contributing to this fall include the economic downturn and reforms to undergraduate funding in England.[4]

Table 1 shows trends for different levels of study at UK institutions. For example, for first degree students, there was a relatively strong increase from 2003–04 to 2011–12, followed by a small decline in 2012–13. The decline in other undergraduates between 2009 and 2011, and part of the increase in first degree students at the same time, could in part be due to 2009 Department of Health reforms to entry qualifications to the nursing profession.[5]

The majority of first degree students study full time (on average 85% over the last ten years), while part-time study is prevalent for other undergraduate students (on average 75% over the last ten years). Forty-two per cent of postgraduate taught students were studying full time in 2003–04, increasing steadily to 51% by 2012–13. Sixty-five per cent of postgraduate research students were studying full time in 2003–04, increasing to 73% by 2012–13.

Figure 5: Students by mode of study, 2003–04 to 2012–13



Source: HESA

Table 1: Annual change in student population by level of study, 2004–05 to 2012–13

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13
Other undergraduate	0.9%	-1.2%	0.9%	-3.4%	1.9%	-2.8%	-9.1%	-13.8%	-28.8%
First degree	2.2%	3.3%	0.7%	1.6%	3.4%	5.2%	3.0%	5.3%	-0.8%
Postgraduate (taught)	1.2%	2.4%	2.0%	-1.2%	8.5%	8.5%	1.1%	-5.2%	-7.0%
Postgraduate (research)	0.3%	1.0%	2.1%	3.5%	1.2%	4.5%	5.0%	5.0%	0.1%
Total	**1.6%**	**2.0%**	**1.0%**	**0.1%**	**3.9%**	**4.1%**	**0.3%**	**-0.2%**	**-6.3%**
First year undergraduates	*0.1%*	*5.0%*	*-1.1%*	*1.6%*	*5.8%*	*1.7%*	*-4.8%*	*-1.3%*	*-16.7%*
First year postgraduates	*-0.6%*	*3.4%*	*3.2%*	*-0.4%*	*10.5%*	*8.8%*	*0.5%*	*-5.4%*	*-3.8%*

Source: HESA

4. Universities UK (2014) *Trends in undergraduate recruitment*
5. Department of Health press release, 'Nursing set to become all graduate entry by 2013' 12 November 2009, available at: www.webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/MediaCentre/Pressreleasesarchive/DH_108359

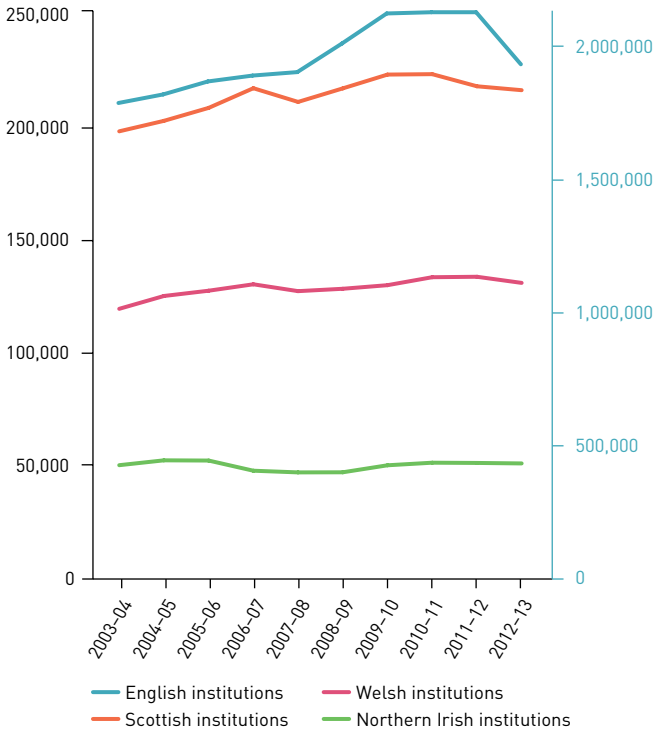
Numbers of first degree full-time students increased by 29% between 2003–04 and 2011–12, and then remained at the same level in 2012–13. Other undergraduate student numbers, both full time and part time, fell between 2009–10 and 2012–13 (by 44% in aggregate).

Postgraduate taught numbers (both full time and part time) increased markedly from 2007–08 to 2010–11 (by 19% in aggregate) before dropping in 2012–13 (by 12%). Full-time postgraduate research student numbers increased by 41% between 2003–04 and 2012–13.

1.4 Student numbers by UK domicile

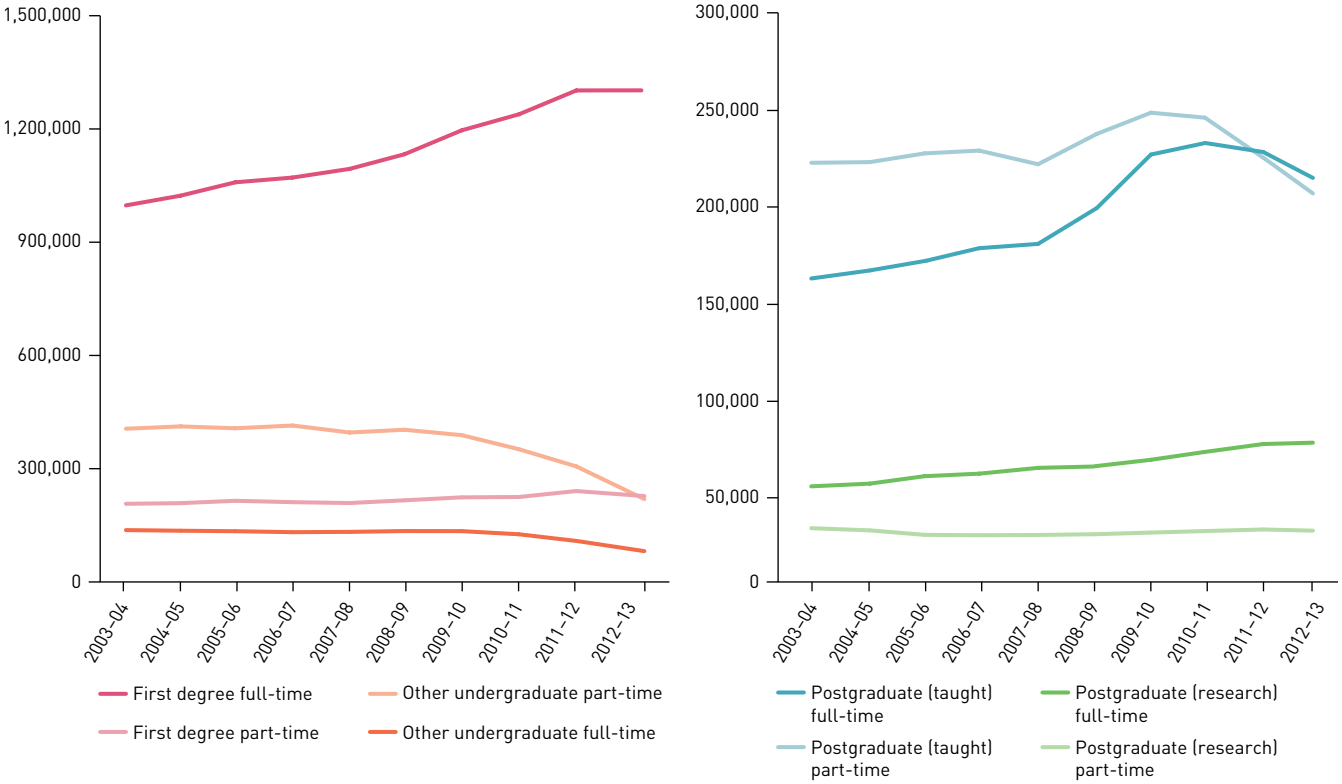
Changes in overall student numbers vary between each of the nations within the UK, as shown in Figure 6. Like the UK as a whole, these changes in total populations from year to year will be shaped by a range of factors, from changes in policy at a national level to fluctuating levels of student demand in different localities and subject areas. Figure 6 shows that following the 2012 reforms to higher education, the number of students at institutions in England fell by 7.3%, following relatively static numbers from 2009–10.

Figure 6: Total student numbers by country of institution, 2003–04 and 2012–13



Source: HESA
Note: right-hand vertical axis for English institutions only

Figure 7: Students by mode and level of study, 2003–04 to 2012–13



Source: HESA

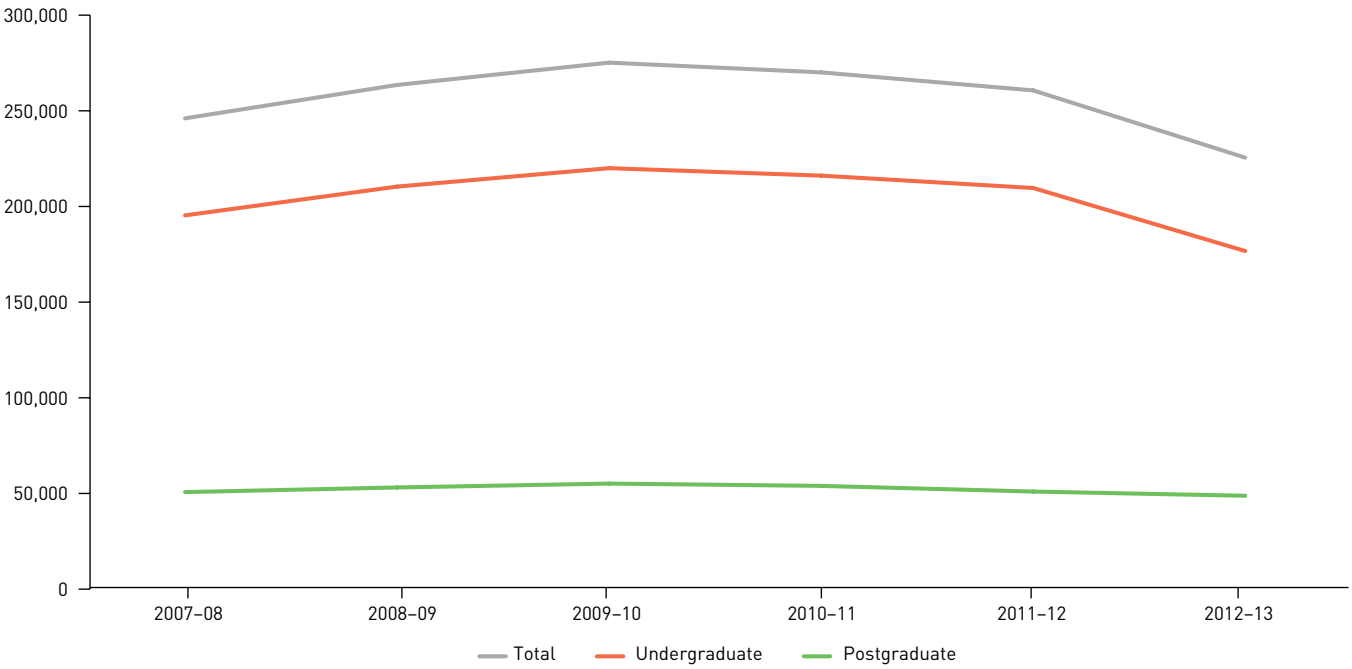
Box 2:
The year of the MOOC

The *New York Times* labelled 2012 'the year of the MOOC' (massive open online course). Two major platforms offering MOOCs from universities, Coursera and MITx (now part of EdX), were launched during 2012. Both platforms developed rapidly with the first courses launching in the autumn term of 2012. By January 2013 Coursera had registered over 2 million unique users. Over 70% of registrations were from outside the United States despite all the courses at the time being offered in English by US universities.

Two UK universities offered MOOCs on Coursera in 2012–13, the University of Edinburgh and the University of London. Between them they offered 10 non-credit-bearing courses of between five and seven weeks on subjects as diverse as equine nutrition, English common law and artificial intelligence planning. This resulted in a combined total of 521,738 registrations, with 217,284 active learners in week one and 43,693 statements of accomplishment issued. The Open University announced its plans to launch its own platform, FutureLearn, in the summer term of 2013 but the first courses did not come online until the following academic year.

As with part-time learning more generally, distance learning enrolments have declined in the last few years (Figure 8). However, this does not accurately reflect the degree to which students are studying online, including as part of conventional face-to-face and full-time courses. Online courses such as MOOCs also represent more informal and accessible forms of distance learning being offered by universities that are not recorded in distance learning statistics.

Figure 8: Number of UK-based distance learning students by level of study, 2007–08 to 2012–13



Source: HESA

Figure 9 (overleaf) shows the number of all undergraduate and postgraduate entrants in 2012–13. The colour indicates the percentage change increase or decline and shows that there was a strong decline in entrants from England, Northern Ireland and the EU to English institutions, while there was an increase in entrants from England, the EU and Scotland to Scottish institutions. The number of entrants from non-EU countries declined in all UK nations.

1.5 International students

Along with the expansion at undergraduate level, growth in student numbers has also come from an increase in the number of international students studying at UK universities. In 2003–04 non-EU students made up 8.6% of all students; by 2012–13 this had risen to 12.8% (Figure 10). In addition, the proportion of students from the rest of the EU increased from 4.2% to 5.4% across

Figure 9: Cross-border flows of students by domicile and country of institution, 2011–12 to 2012–13

	Country of institution			
Domicile of entrant	England	Wales	Scotland	Northern Ireland
England	578,260	12,700	7,765	900
% change	-18.6%	-19.4%	5.5%	1.7%
Northern Ireland	6,375	215	1,135	18,485
% change	-17.8%	-18.9%	-16.8%	3.8%
Scotland	12,765	185	54,305	85
% change	-3.9%	0.0%	0.5%	6.3%
Wales	14,675	33,425	275	45
% change	-1.4%	1.4%	7.8%	28.6%
EU	42,620	3,220	8,820	1,460
% change	-16.1%	-10.7%	6.0%	-27.9%
Non-EU	142,150	12,105	15,825	1,825
% change	-0.6%	-1.5%	-1.6%	-15.9%

% change

-30% 0 30%

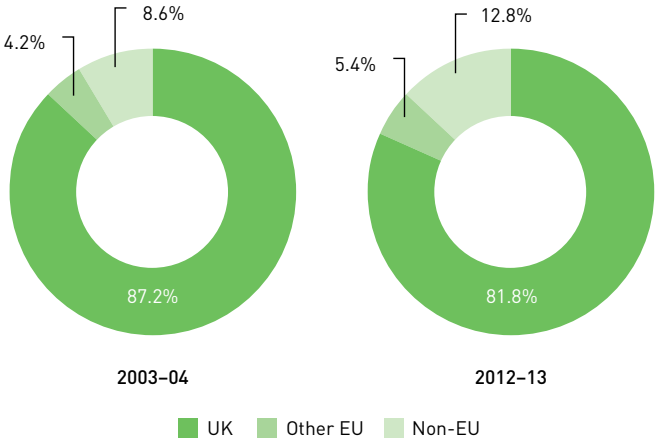
Source: HESA

the same period. However, even after these increases, international students continue to make up a relatively small proportion of total students.

After a broad trend of growth between 2003–04 and 2011–12, there has been a 1% decline in non-EU student numbers. The number of first year students declined over the last two years from 174,225 in 2010–11 to 171,910 in 2012–13. The number of non-EU entrants studying science, technology, engineering and mathematics (STEM) subjects fell by 2% in 2012–13.

Within each level of study the pattern varies (Figure 11). At first degree level, non-EU students grew in number by 59,000 between 2003–04 and 2012–13, but remained a small share of a much larger population: in 2003–04, non-EU students represented just 5.9% of all first degree

Figure 10: Students by domicile, 2003–04 and 2012–13



Source: HESA

Figure 11: Students by domicile and level of study, 2003–04 and 2012–13

	UK		Other EU		Non-EU	
	2003–04	2012–13	2003–04	2012–13	2003–04	2012–13
Other undergraduate	483,925	252,605	9,470	6,405	19,180	16,070
Percentage share	94.4%	91.8%	1.8%	2.3%	3.7%	5.8%
First degree	1,095,375	1,324,485	42,935	73,035	71,805	130,875
Percentage share	90.5%	86.7%	3.5%	4.8%	5.9%	8.6%
Postgraduate (taught)	286,120	273,580	29,130	31,850	74,830	121,835
Percentage share	73.3%	64.0%	7.5%	7.5%	19.2%	28.5%
Postgraduate (research)	53,260	63,960	10,640	13,975	23,510	31,180
Percentage share	60.9%	58.6%	12.2%	12.8%	26.9%	28.6%
Totals	1,918,680	1,914,630	92,175	125,270	189,325	299,950

Source: HESA
Note: Totals of figures may not match, as the sums were created from unrounded figures. All figures are rounded to the nearest 5.

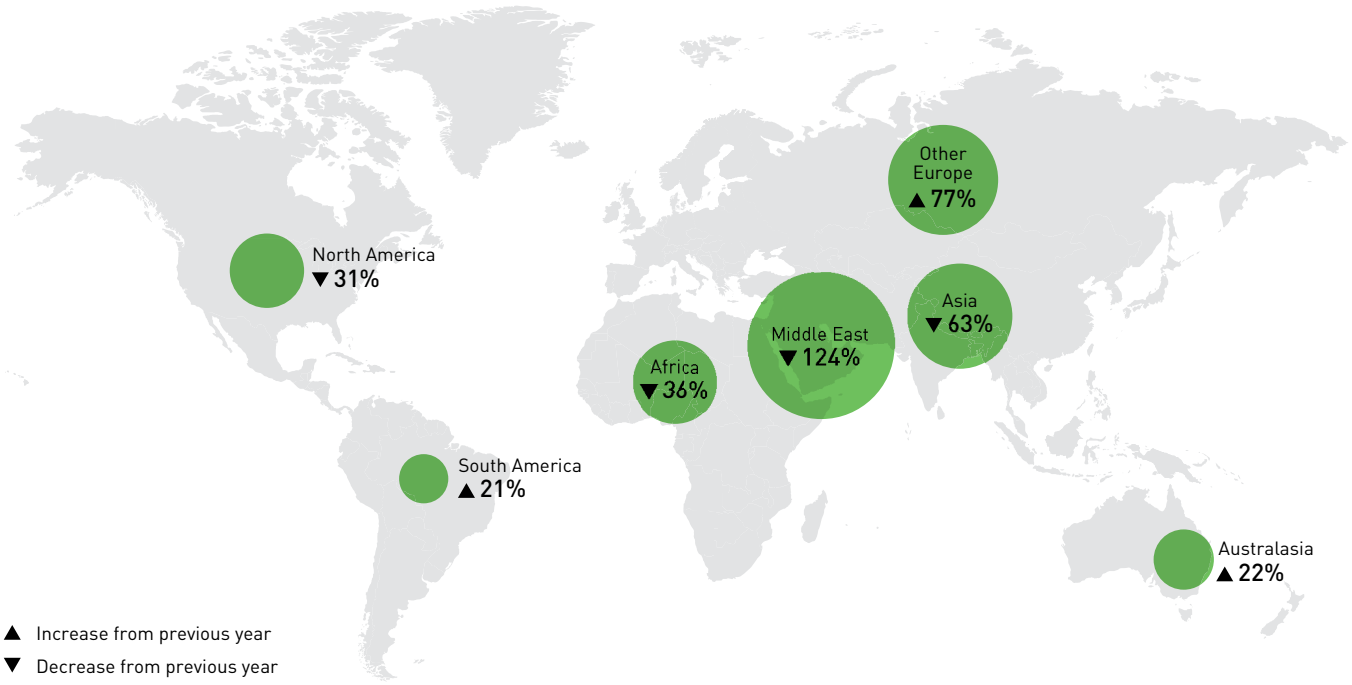
students, rising to 8.6% in 2012–13. At postgraduate taught level, the increase was similar in numerical terms, with the non-EU population expanding by 47,000. However, this represented a larger share of a smaller population than at first degree level, so the percentage of postgraduate taught students from outside the EU rose from 19.2% to 28.5%.

The proportion varies quite widely between subjects. For example, of all postgraduate taught students, 48% studying computer sciences and 48% studying engineering are non-EU, compared to just 31% in the physical sciences. Fluctuations in demand from non-EU students may therefore have a particular impact on courses with typically lower levels of home and EU student enrolments.

In both 2003–04 and 2012–13, the broad subject area attracting the most non-EU students – at both undergraduate and postgraduate level – was business and administrative studies. The popularity of this subject area grew significantly across the period, with the number of non-EU students more than doubling from over 50,000 to over 101,600. In the same period the number of non-EU engineering and technology students grew from nearly 24,000 to 38,400. Between 2011–12 and 2012–13, there were falls in non-EU undergraduate students in computer sciences, languages and subjects allied to medicine, and increases in education, law, and biological and physical sciences.

Figure 12 shows the international regions from which students came to study in the UK. The largest number of non-EU students were domiciled in Asia, and within this group, 57% came from China or India. The region with the largest percentage growth between 2003–04 and 2012–13 was the

Figure 12: Change in non-EU students by region of origin, 2003–04 and 2012–13



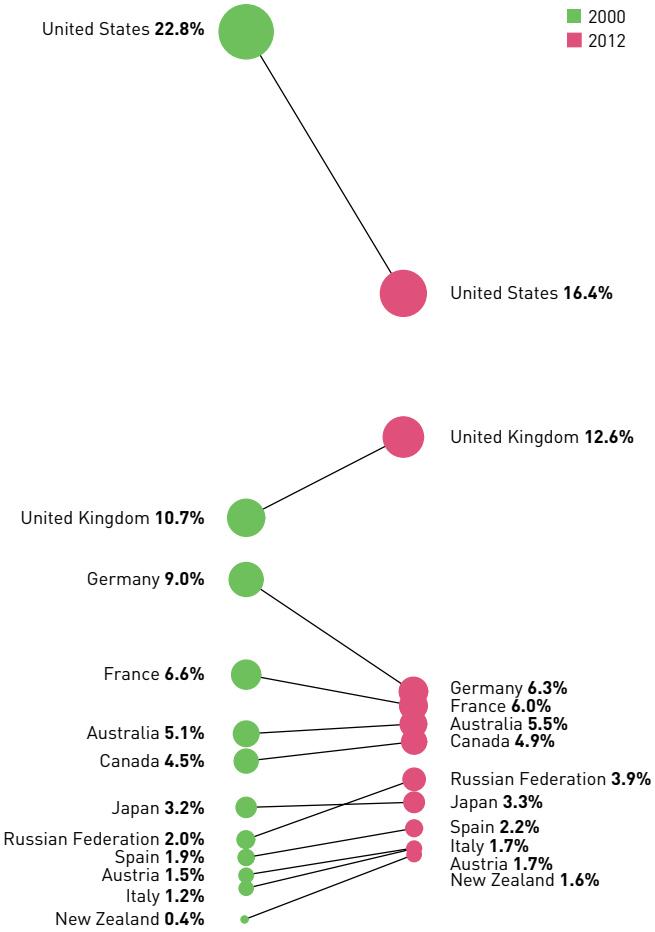
	2003–04	2012–13	Percentage share of total
Asia	114,700	186,545	62%
Africa	25,025	34,160	11%
North America	20,540	26,920	9%
Middle East	11,775	26,380	9%
Other Europe	10,495	18,610	6%
South America	3,595	4,345	1%
Australasia	2,055	2,505	1%

Source: HESA

Middle East, although this was from a lower base. While Figure 12 indicates broad trends, recruitment from year to year can vary widely, especially at a country level. For example, in 2012–13 the number of students from China was up 6% on the previous year, while the number from India was down 25%.

In 2000, the UK had a 10.7% share of the global market for students studying abroad. By 2012 this had grown to 12.6% (Figure 13).[6] International students are of great importance both to the UK higher education sector and to the country more widely, with non-EU students contributing more than £7 billion to the UK economy.[7] And, as the government's international education strategy acknowledges, they enhance the UK's cultural life and broaden the educational experience of the students they study alongside.[8]

Figure 13: Shares of international student market, 2000 and 2012



Source: OECD (2014) *Education at a Glance 2014*

1.6 Gender and age profiles

In 2012–13, 56% of students were female. Within this there was some variation by level of study: at first degree level 55% of students were female, while at postgraduate research level the proportion of women was around 47% (this had increased from 44% in 2003–04). At the same time, there was variation by domicile (Table 2). The gender split varies widely by country: 80% of students from Bangladesh were male, compared to just 34% of students from Taiwan.

In addition, there was substantial variation in the proportions by gender and level of study between different subjects of study (Figure 14). It is beyond the scope of this report to explore the reasons for these differences, but the wide variation by gender between subjects is a striking feature of the student population.

Between 2003–04 and 2012–13, the number of undergraduate students aged under 30 increased by 250,000 and the number of postgraduate students under 30 increased by 70,000. The number of undergraduate students aged 30 and over decreased by 159,000, and the number of postgraduate students aged 30 and over decreased by 9,000. Figure 15 shows changes in the age of students in further detail, and Figure 16 shows year-on-year percentage changes. The number of students under 30 increased every year between 2003–04 and 2011–12 for undergraduates and between 2003–04 and 2010–11 for postgraduates. However, the number of students over 30 did not always decrease each year, despite the overall trend.

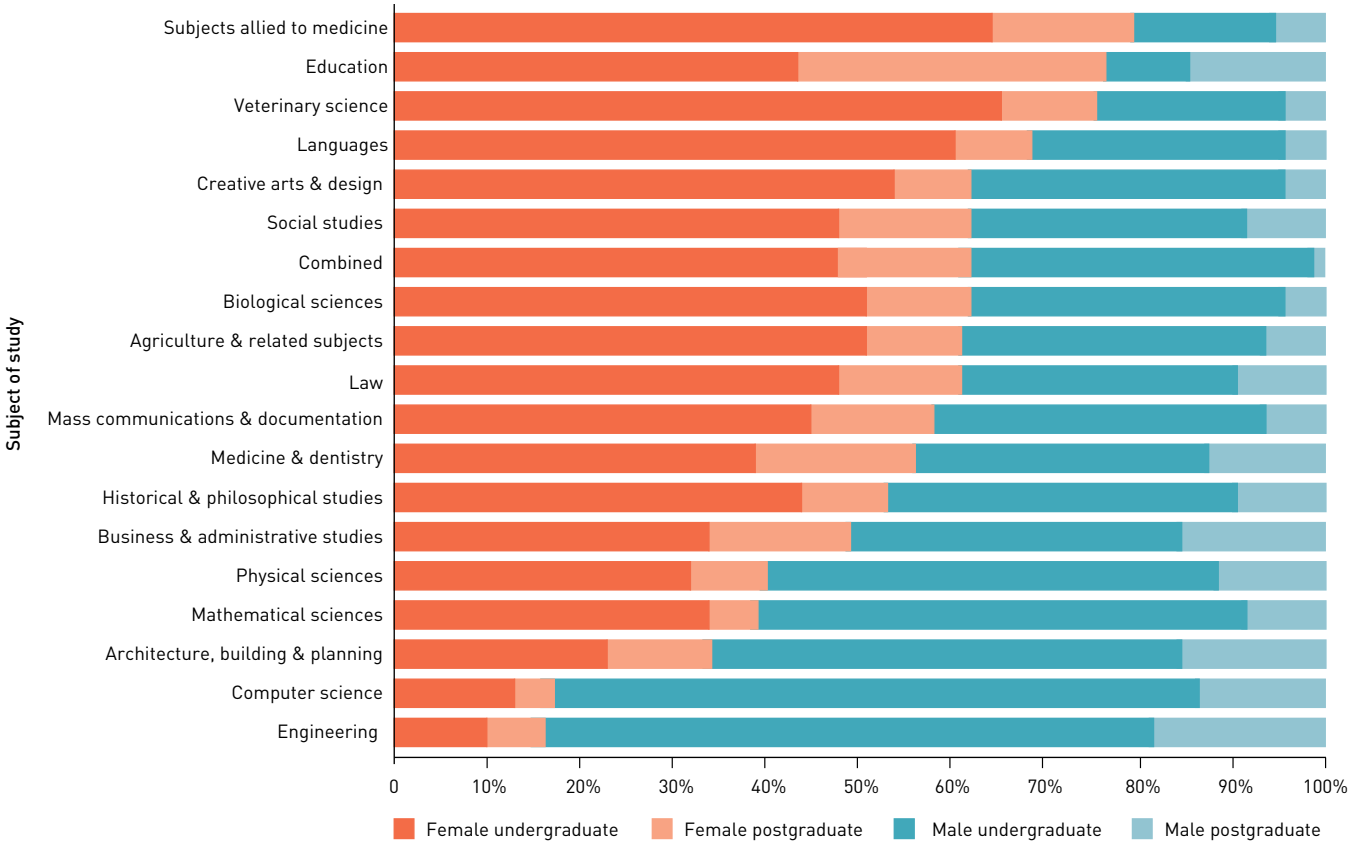
Table 2: Gender of students by domicile, 2012–13

	Percentage of female students	Percentage of male students
UK students	57.5%	42.5%
Other EU students	53.7%	46.3%
Non-EU students	49.2%	50.8%

Source: HESA

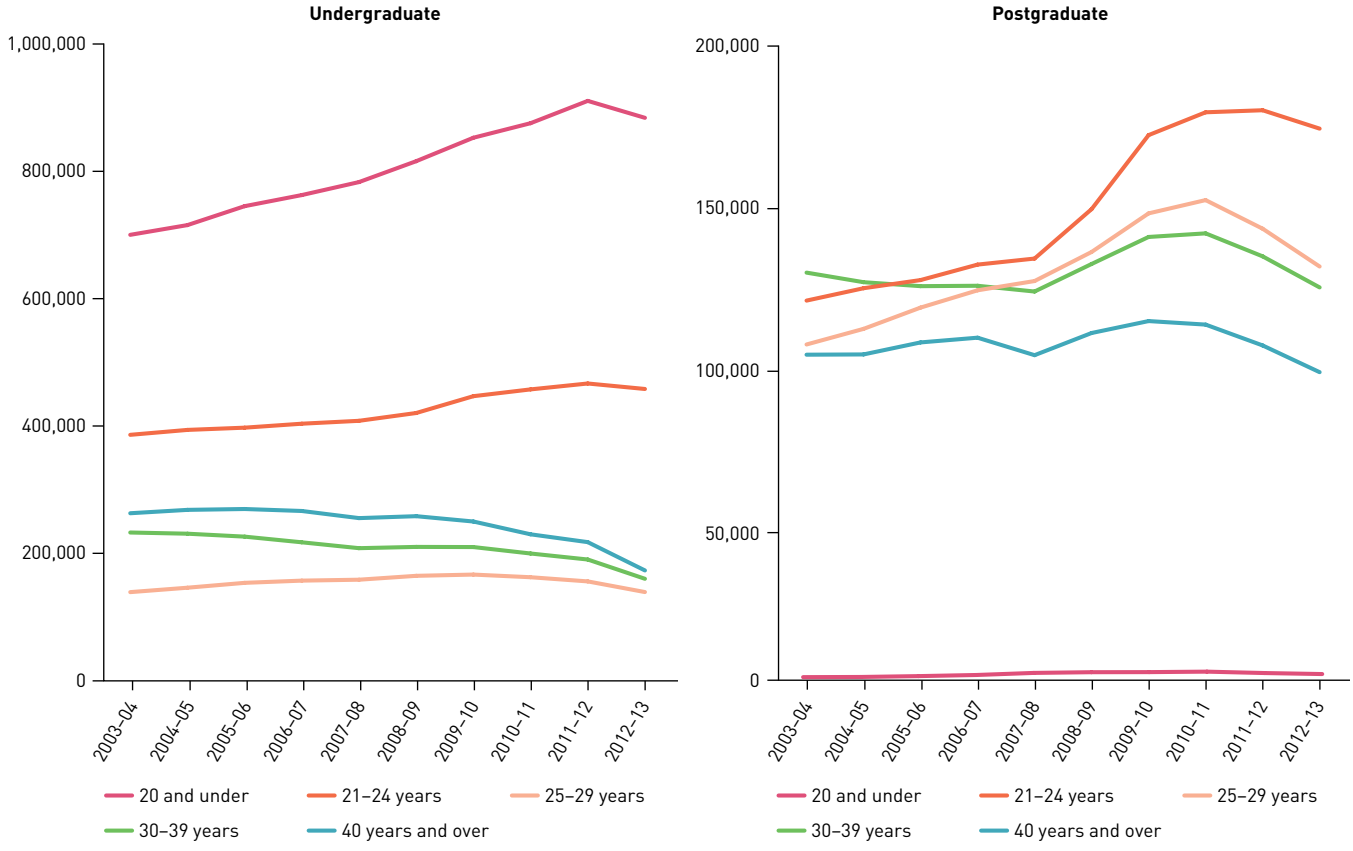
6. OECD (2014) *Education at a Glance 2014*
7. Universities UK (2014) *International students in UK higher education: the UK and its competition*
8. HM Government (2013) *International Education: Global Growth and Prosperity* p.3

Figure 14: Subject of study by level and gender, 2012–13



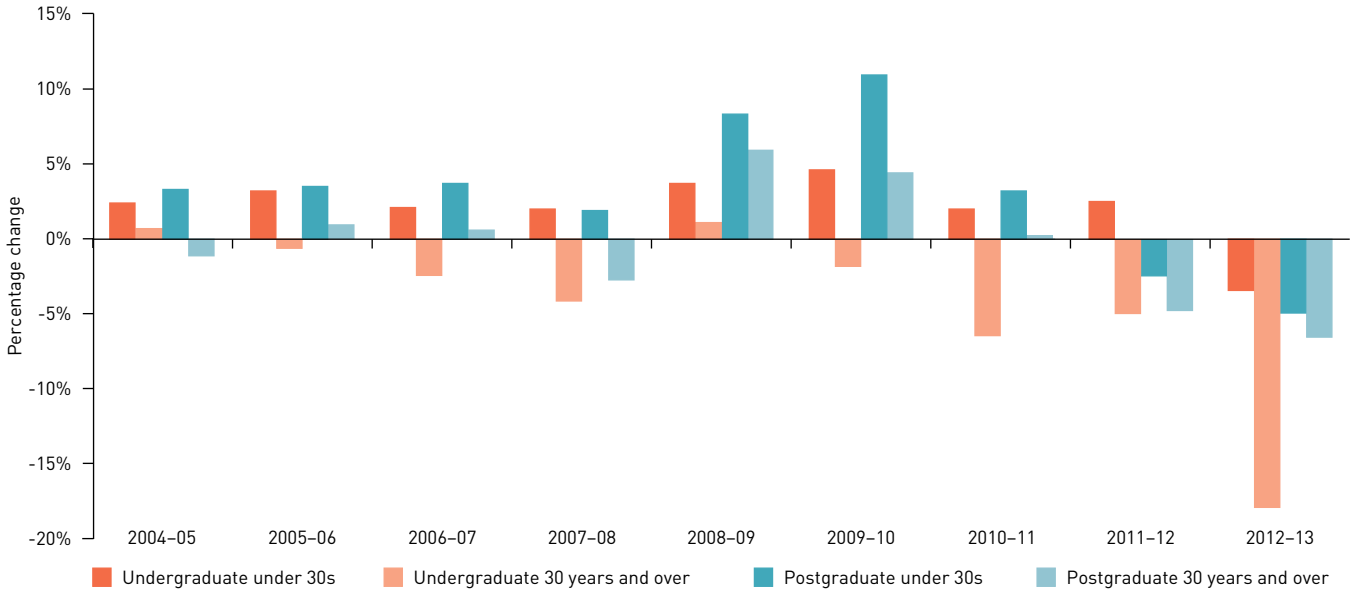
Source: HESA

Figure 15: Students by age group and level of study, 2003–04 to 2012–13



Source: HESA

Figure 16: Annual change in students by age group, 2004–05 to 2012–13



Source: HESA

1.7 Subject choice

Changes at the level of broad subject groups varied widely between 2003–04 and 2012–13. The three subjects with the largest increases in absolute numbers were biological sciences, business and administrative studies, and creative arts and design (Table 3). The changes in student numbers by broad subject areas demonstrate one important way in which the student population is altering over time, and illustrate that universities are responding flexibly to student choice and economic demands.

Table 3: Students by subject of study, 2003–04 and 2012–13

	2003–04	2012–13	Change	Percentage change
Veterinary science	3,935	5,760	1,825	46%
Mathematical sciences	30,105	42,235	12,130	40%
Biological sciences	143,660	201,520	57,860	40%
Physical sciences	70,265	93,050	22,785	32%
Medicine & dentistry	50,760	66,745	15,985	31%
Agriculture & related subjects	14,830	19,020	4,190	28%
Creative arts & design	139,130	172,860	33,730	24%
Engineering	129,305	158,115	28,810	22%
Business & administrative studies	292,340	337,245	44,905	15%
Social studies	187,290	213,360	26,070	14%
Mass communications & documentation	44,710	50,425	5,715	13%
Architecture, building & planning	47,000	52,695	5,695	12%
Law	82,175	89,190	7,015	9%
Subjects allied to medicine	285,600	279,940	-5,660	-2%
Education	189,625	179,910	-9,715	-5%
Languages	132,625	124,280	-8,345	-6%
Historical & philosophical studies	99,055	92,740	-6,315	-6%
Computer science	135,235	89,500	-45,735	-34%
Combined	122,530	71,680	-50,850	-42%

Source: HESA

1.8 Outcomes and achievement

Between 2003–04 and 2012–13 the number of higher education qualifications awarded increased by 192,000 (one third) to a total of almost 788,000 (Figure 17). The number of postgraduate taught qualifications awarded grew by almost 72,500 (44%), the number of postgraduate research qualifications increased by 7,500 (41%), while the number of first degrees awarded grew by almost 112,000 (38%). The number of foundation degrees increased greatly, from around 3,000 in 2003–04 to more than 27,000 in 2010–11, before declining to 25,000 in 2012–13.

The Destinations of Leavers from Higher Education (DLHE) survey provides information on the activities of graduates six months after their course ends. UK graduates, including recent graduates, are less likely to be unemployed than non-graduates, even in a recession.[9]

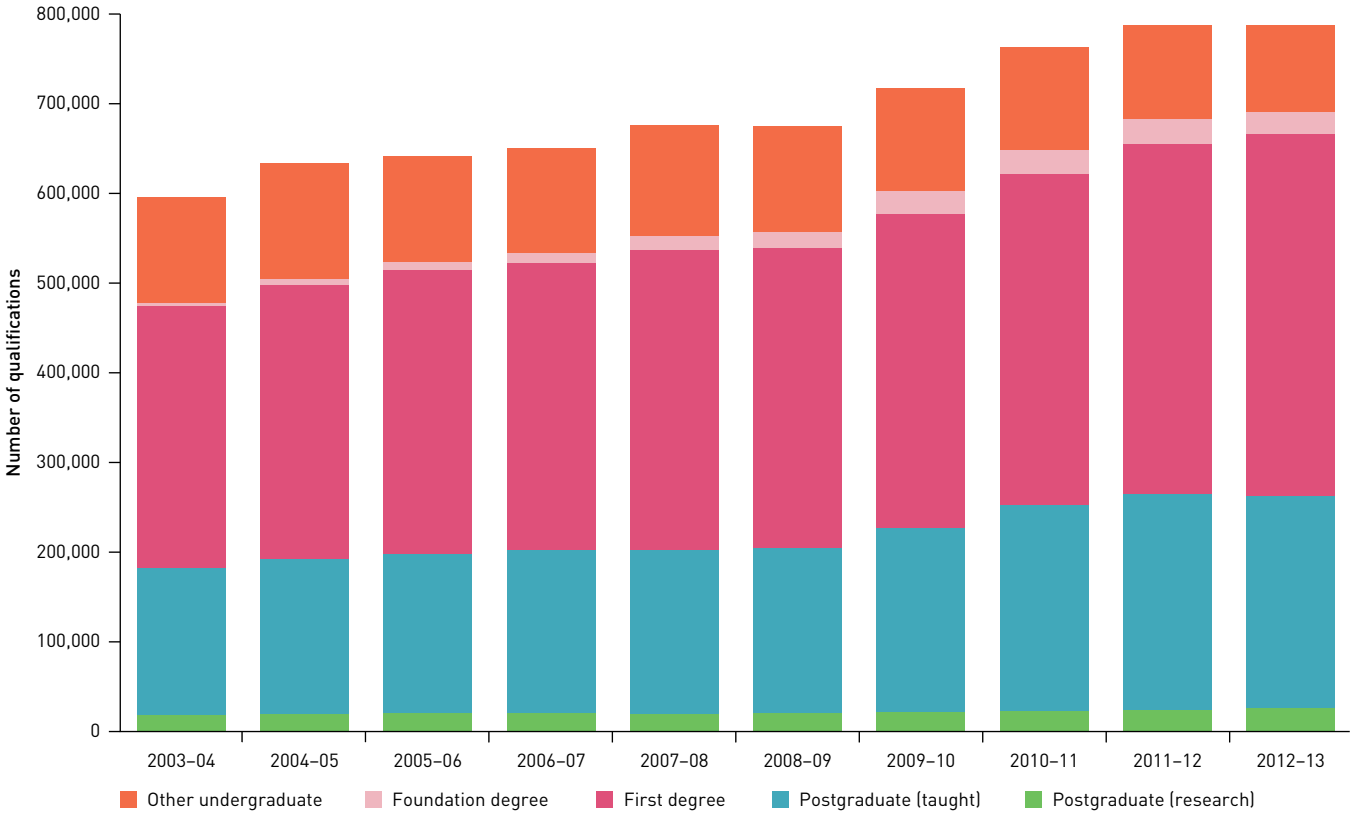
Six months after graduation, of those graduates looking to work or study, 94% are in employment or further study. Postgraduates are most likely to be working full time, while a large percentage of other undergraduates are engaged in full-time further study, training or research.

There is a strong evidence base for the financial benefits of undertaking higher education. A government report shows that female students who go to university can expect to boost their lifetime earnings by £250,000. Male students can expect to increase their lifetime earnings by £165,000.[10] This reinforces international evidence of a graduate earnings premium; across the OECD group of nations, while there are differences between subjects and occupations, graduates earn more on average than workers who do not have a higher education qualification.[11]

As with other advanced economies, the UK workforce is becoming more highly qualified. For example, in 2003, 35.6% of 30- to 34-year-olds in the UK labour force had a higher education qualification; ten years later this figure was 51.1% (Figure 19).

This growth in the graduate workforce is meeting the growing demand from employers for higher-level skills. Three of the four occupational groups with a growing share of the UK workforce employ significant proportions of graduates; meanwhile the five occupational groups with a declining share of the UK workforce employ smaller proportions of graduates (Figure 20).

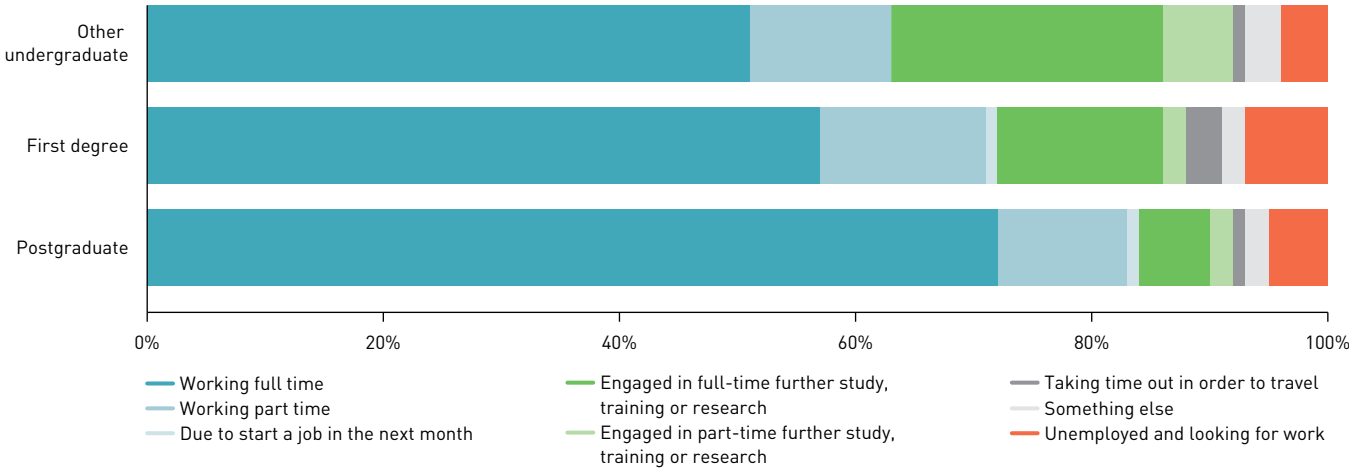
Figure 17: Qualifications awarded by level, 2003–04 to 2012–13



Source: HESA

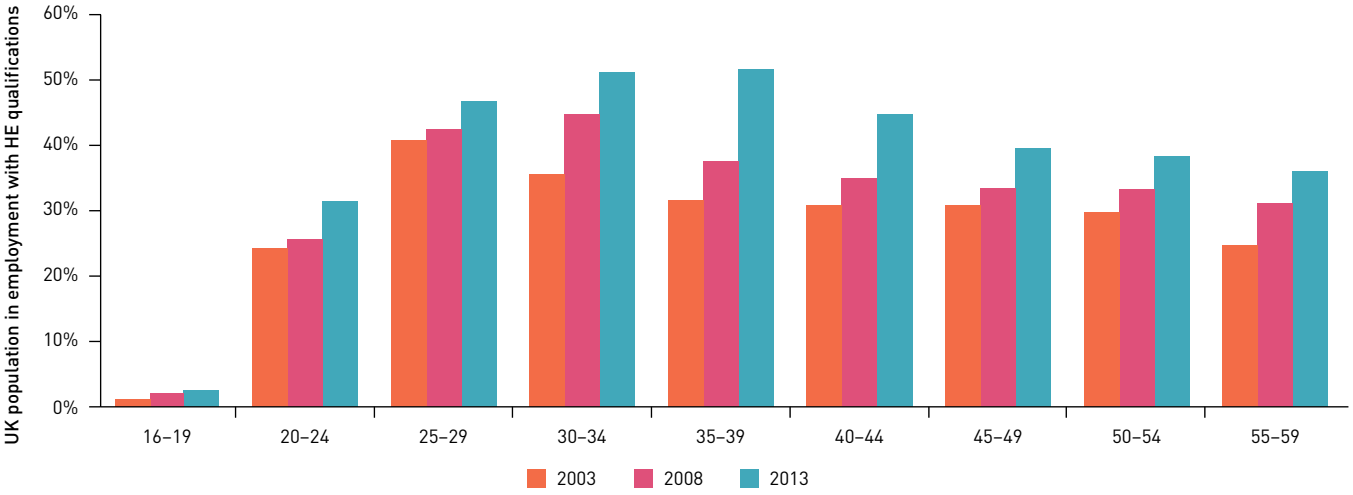
9. ONS (2013) *Graduates in the UK Labour Market 2013*
10. BIS (2013) *The impact of university degrees on the lifecycle of earnings*
11. OECD (2014) *Education at a Glance 2014*

Figure 18: Destinations of leavers by qualification, 2012–13



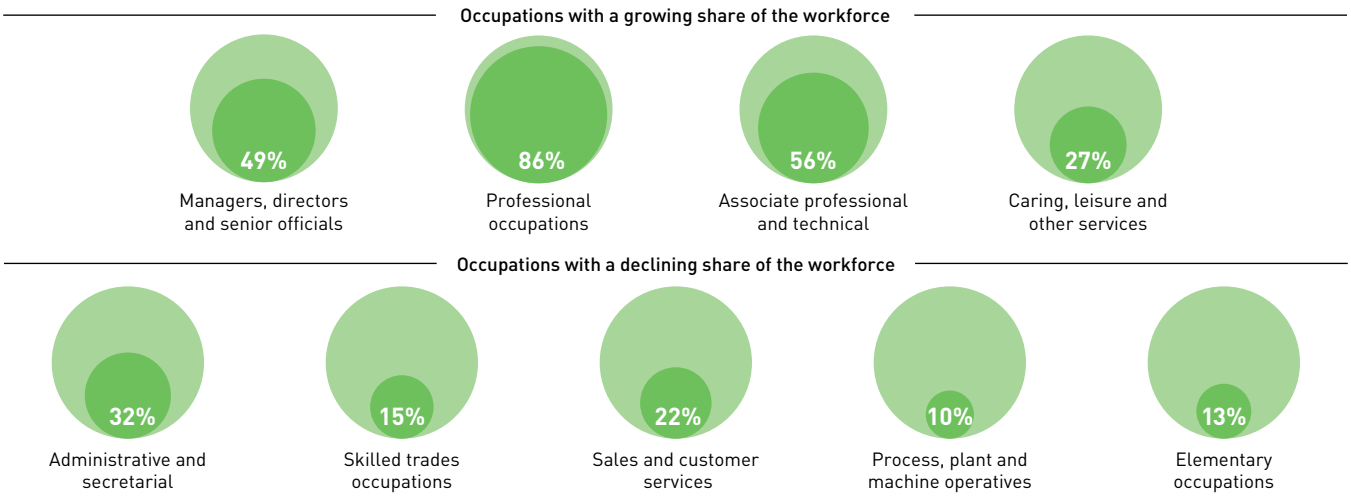
Source: HESA DLHE data

Figure 19: Percentage of UK population in employment with higher education qualifications by age, 2003, 2008 and 2013



Source: HESA from Labour Force Survey and Annual Population Survey

Figure 20: Percentage of graduates within occupations, 2014



Source: Labour Force Survey 2014 Q1 and UKCES (2014) *Working Futures 2012–2022*

CHAPTER 2:

STAFF

In 2012–13 there were 382,515 staff employed by higher education institutions, an increase of 13.1% since 2003–04. (This figure, and the rest of the analysis in this section, covers staff on open-ended or permanent contracts and fixed-term contracts unless otherwise stated. In addition, there were 110,570 'atypical' staff[12] employed in 2012–13.)

Figure 21 shows the numbers of academic and non-academic staff on open-ended or permanent and fixed-term contracts. The net growth in staff numbers across this period totals 44,415, 80% of which is attributable to an increase in academic staff.

The number of academic staff varies according to subject area, as shown in Table 4. This data is not directly comparable to previous years due to changes in definitions. Academic staff numbers also vary according to background. In 2012–13, 14% of academic staff were from the rest of the EU, and 11% were of non-EU nationality.[13] Slightly more than half of all academic staff hold a doctorate as their highest qualification, around a third hold another postgraduate qualification or higher degree, and 14% hold a first degree or other undergraduate qualification.

Further analysis of the academic staff population reveals changes in the proportion working part time, and also in the age profile. The number of full-time academic staff grew by 15,600 between 2003–04 and 2012–13 to reach a total of 122,500, while the number of part-time staff grew by 19,755 to reach a total of 63,085. As a result, the proportion of academic staff working part-time grew from 29% to 34%.

Table 4: Academic staff by cost centre, 2012–13

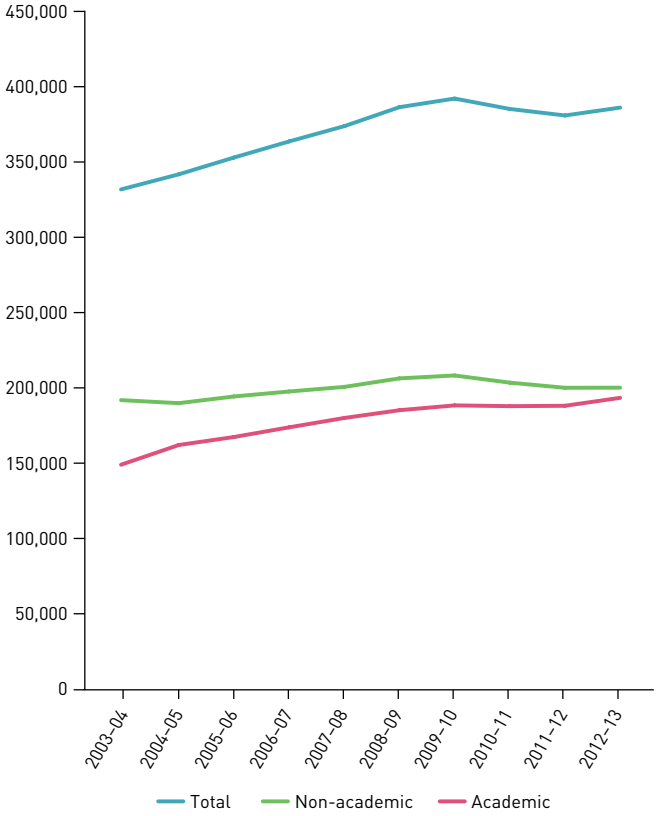
	2012–13	% of total
Medicine, dentistry & health	44,905	24.7%
Administrative, business & social studies	36,695	20.1%
Biological, mathematical & physical sciences	28,025	15.4%
Engineering & technology	21,440	11.8%
Humanities & language based studies & archaeology	17,025	9.3%
Design, creative & performing arts	15,245	8.4%
Education	12,775	7.0%
Architecture & planning	3,760	2.1%
Agriculture, forestry & veterinary science	2,260	1.2%

Source: HESA

12. The definition of 'atypical' includes staff employed on a temporary basis. From 2012–13 it became optional to return non-academic atypical staff data to HESA and many institutions stopped doing so. Therefore, the figure from 2012–13 is not comparable with the figure from 2011–12, which was 187,865.
13. Percentages are those of staff with known nationality.

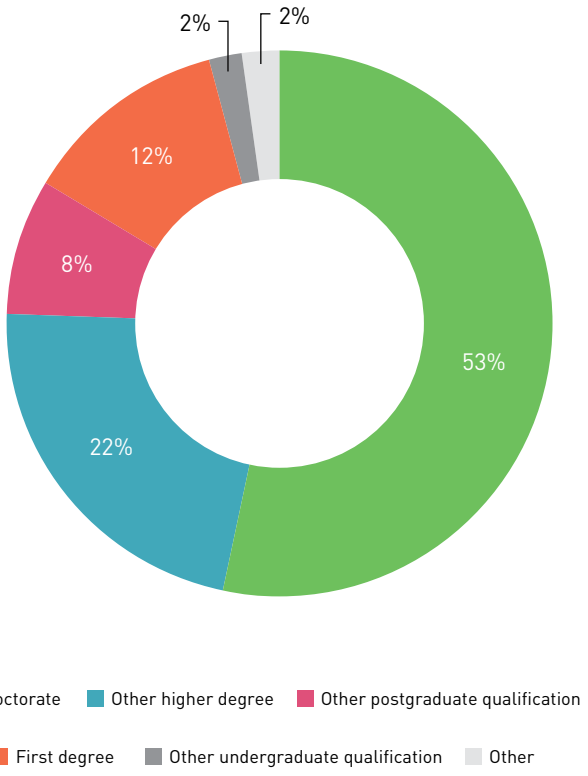
Figure 23 shows that the overall change in academic staff numbers between 2003–04 and 2012–13 is not uniformly distributed by age group. The number of academic staff aged over 60 increased significantly, with most of the increase among the number of part-time staff. Other groups showing changes include full-time academic staff aged 31 to 35 (up 4,210, or 26%), and full-time academic staff aged 46 to 50 (up 3,455, or 24%).

Figure 21: Staff by employment function, 2003–04 to 2012–13



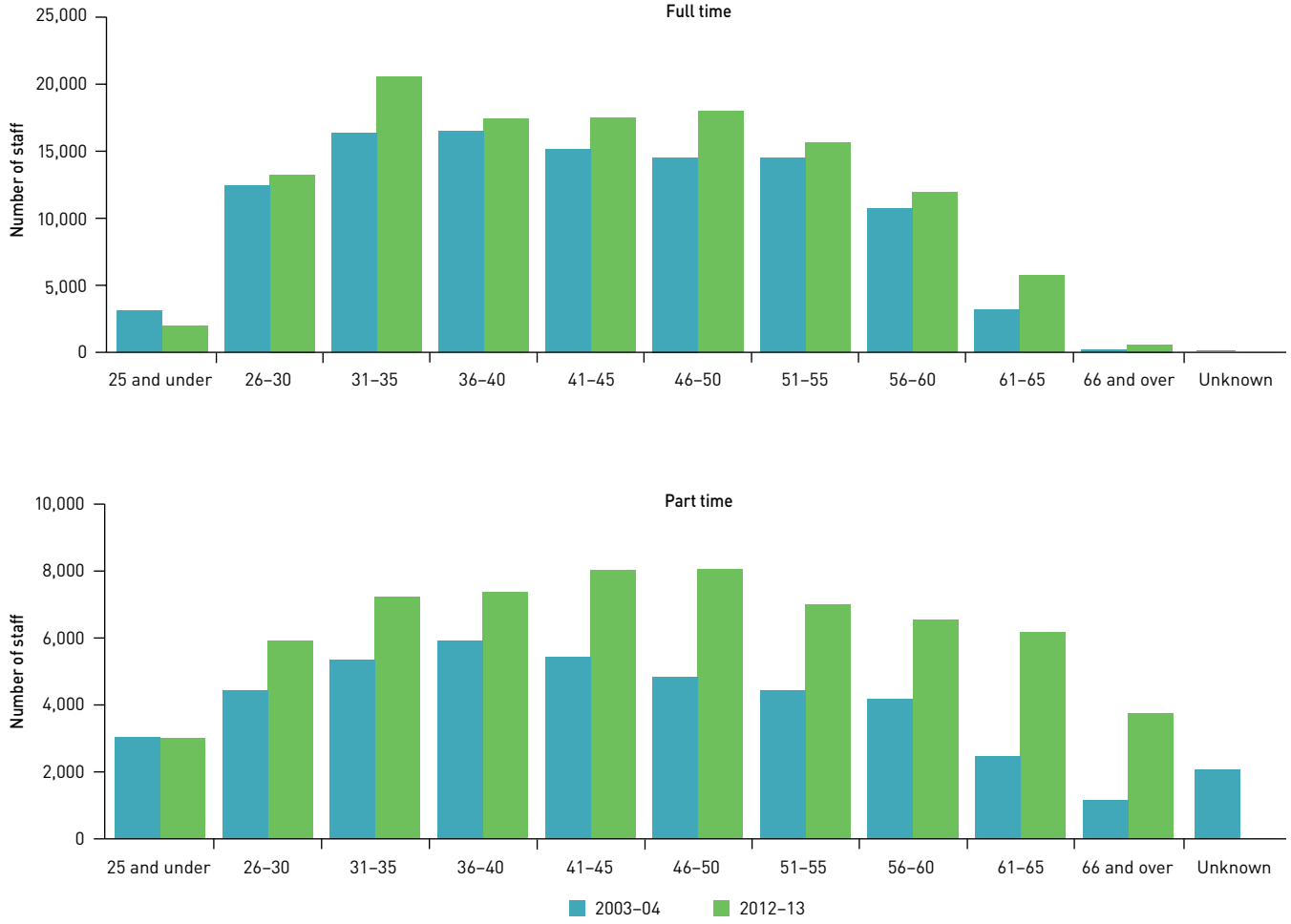
Source: HESA

Figure 22: Highest qualification held by academic staff, 2012–13



Source: HESA

Figure 23: Change in age profile of academic staff between 2003–04 and 2012–13 by mode of employment



Source: HESA

CHAPTER 3:

FINANCE

In 2012–13, the total income of the UK higher education sector was £29.1 billion, and total expenditure was £27.9 billion. The positive difference between net income and expenditure was therefore a 'surplus' of £1.23 billion, or 4.2% of income in 2012–13, as compared to 4.4% (also £1.23 billion) in 2011–12.

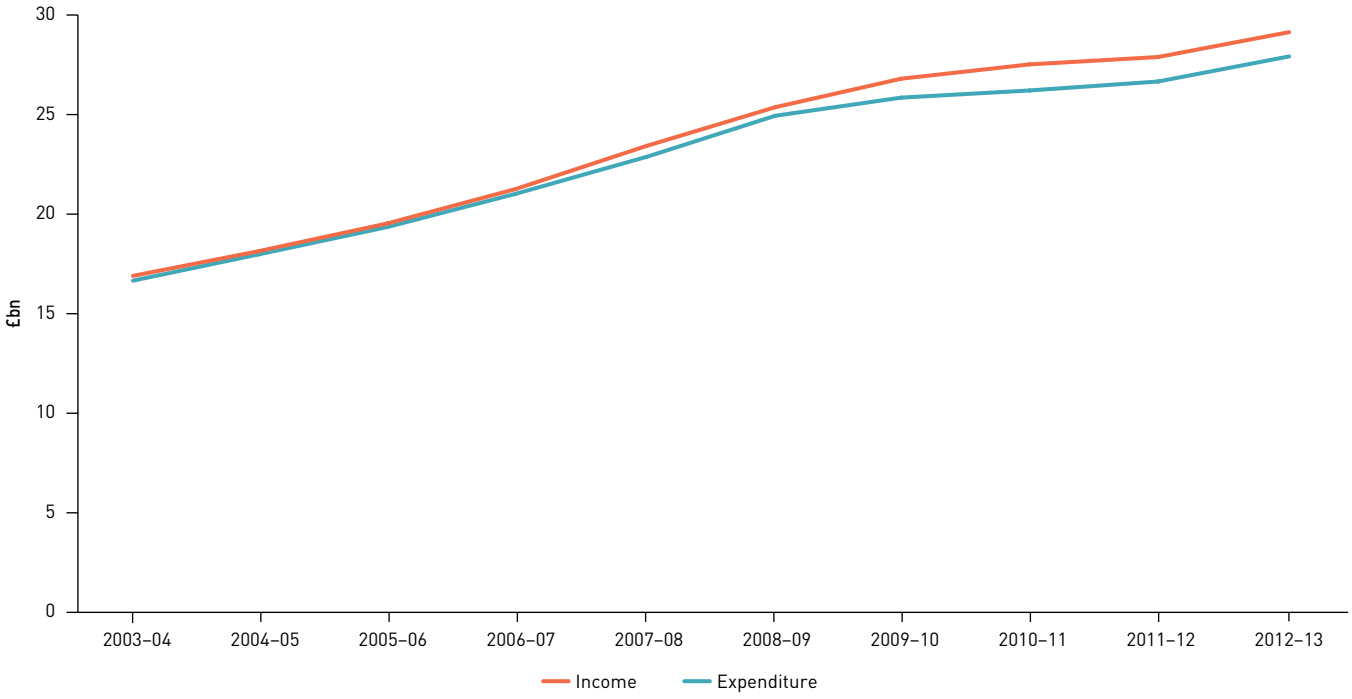
These small percentage surpluses have played an increasingly important role in the effective running of universities in recent years. They act as a buffer against unexpected outcomes arising from uncertainty in student recruitment, both nationally and internationally. Surpluses are also becoming an ever more important part of institutions' strategies for financing new capital investment, particularly now that public capital funding for teaching and research is significantly lower than historical levels. Surpluses have always been reinvested by universities to maintain the quality of their infrastructure. Now, however, they are being used to cover both this expenditure and new capital projects. Analysis of the finances of universities in England by HEFCE shows that capital expenditure is projected to be £3,439 million in 2013–14, 29.5% higher than the level reported for 2012–13.[14]

Figure 25 shows how the sources of income generated by higher education institutions have changed over time. Tuition fee and education contract income increases across the period, due to increases in student numbers and tuition fee levels. In 2012–13, tuition fees from non-EU students had grown to £3.5 billion, 12.1% of the sector's total income. Funding body grants (which include recurrent and capital grants for teaching, research and innovation) grew at an average of 7% a year from 2004–05 to 2007-08. This was followed by smaller increases and then a 2% decline in 2010–11, a drop by 7% in 2011–12 and a further drop of 15% in 2012–13. The balance between tuition fee income and funding body grants will continue to change beyond 2012–13, as the reforms to higher education bed in.

Finance data also shows how universities are working hard to diversify their income streams. This is demonstrated, for example, by growth of the 'other income' category, driven in part by increased income from trading activities (such as conferences and accommodation).

Research income from grants and contracts is presented in more detail in Figure 27. This comprises the research income universities generate in addition to any 'QR' (quality-related) research funding allocated by the funding councils. This shows that universities have secured increased investment from a wide range of sources including government, charity, industry and the EU. The largest single category

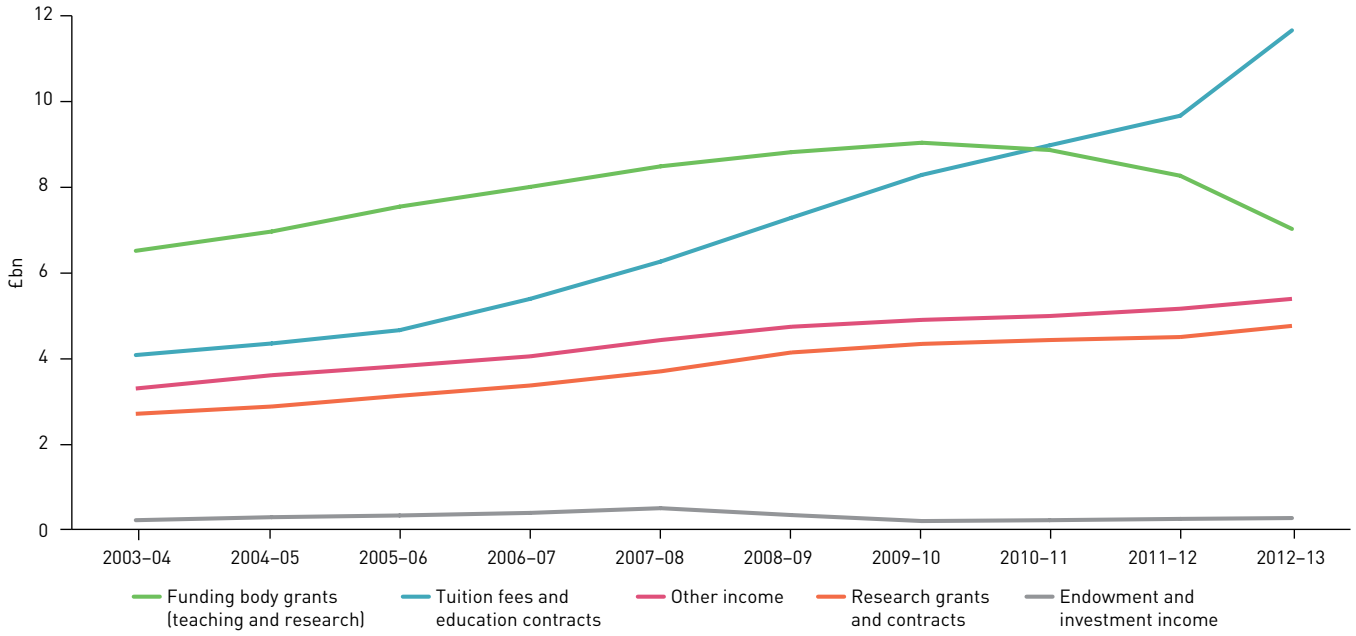
Figure 24: Total income and total expenditure, 2003–04 to 2012–13



Source: HESA

14. HEFCE (2014) *Financial health of the higher education sector: 2013–14 to 2016–17 forecasts*

Figure 25: Income by source, 2003–04 to 2012–13



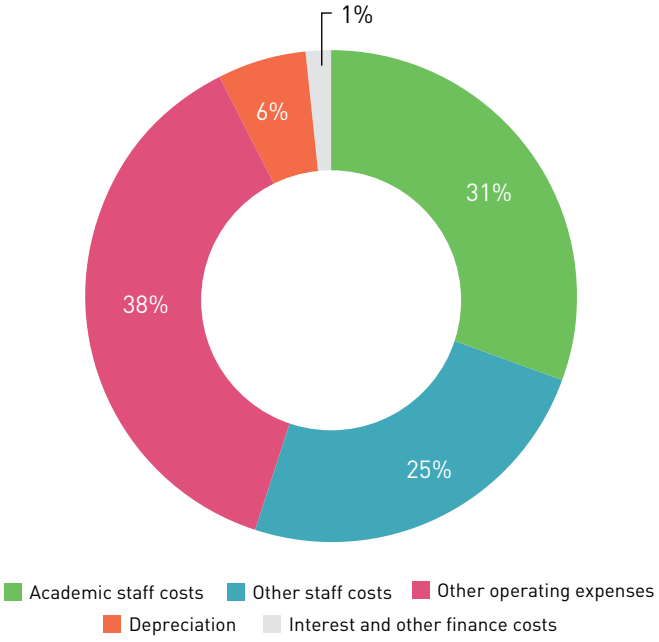
Source: HESA

in this analysis is the combined income from the research councils, which grew strongly to a peak in 2009–10, and then declined by £76 million over the following two years. In 2012–13 it grew by £31 million. Research income from UK charities grew by 41% from 2003–04 to 2012–13, reaching a total of £976 million in 2012–13, while research income from UK industry grew by 18%, to £292 million.

The rise in income of UK universities is due in part to their increased knowledge exchange activity. The Higher Education Business and Community Interaction Survey identified £3.6 billion in income from the knowledge exchange activity of UK universities in 2012–13, an increase of 3% on the previous year. Income was generated by a wide range of activities, such as undertaking contract research, providing consultancy or training and licensing access to intellectual property. Over the longer term, total income from knowledge exchange work has risen greatly, by 45% in real terms since 2003–04.[15]

Staff costs make up a little over half of all expenditure in the higher education sector (Figure 26). While this is the sector's biggest expenditure, the latest forecasts published by HEFCE show that overall, as a percentage of total income, staff costs are expected to remain relatively stable between 2013–14 and 2016–17.[16]

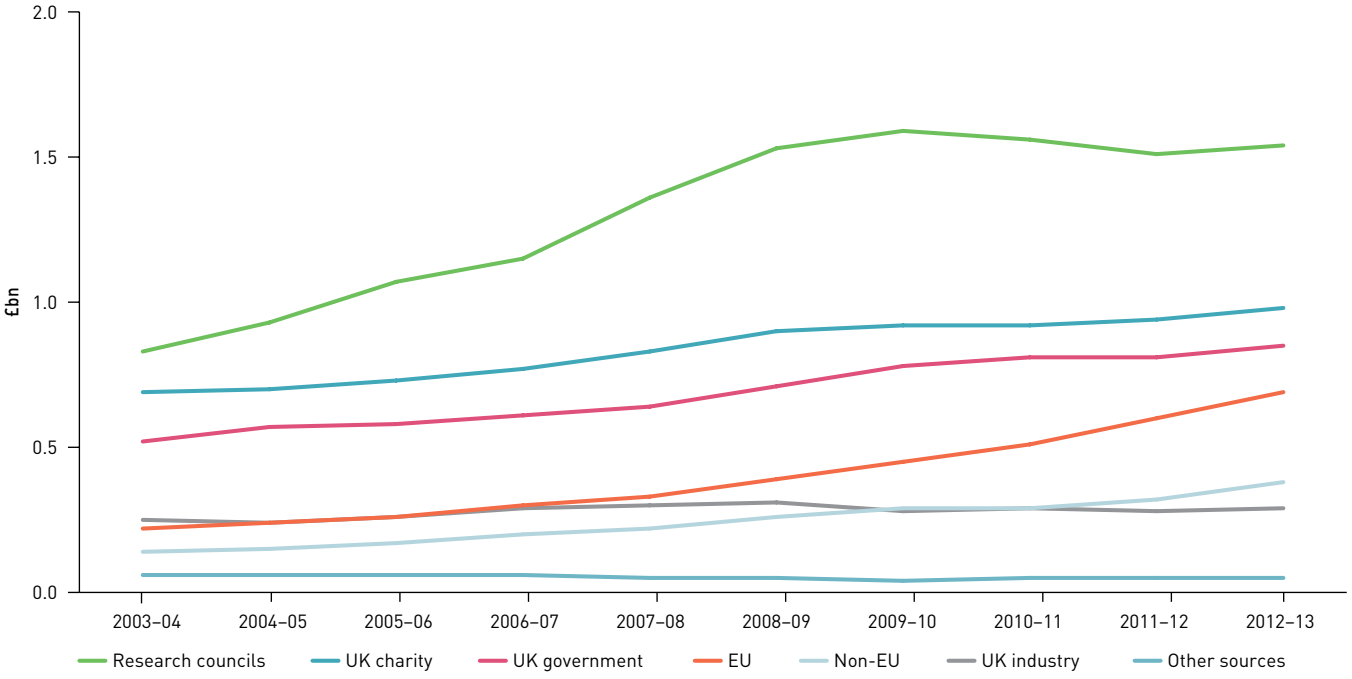
Figure 26: Expenditure of higher education institutions, 2012–13



Source: HESA

15. HEFCE Higher Education – Business and Community Interaction Survey 2012–13
16. HEFCE (2014) *Financial health of the higher education sector: 2013–14 to 2016–17 forecasts*

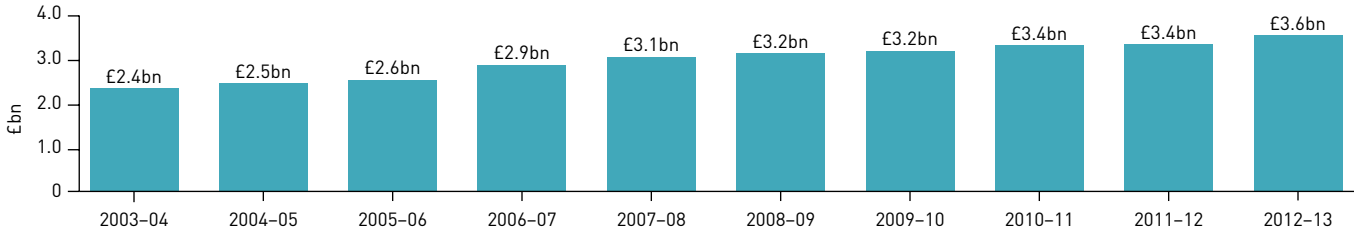
Figure 27: Trends in research income by source, 2003–04 to 2012–13



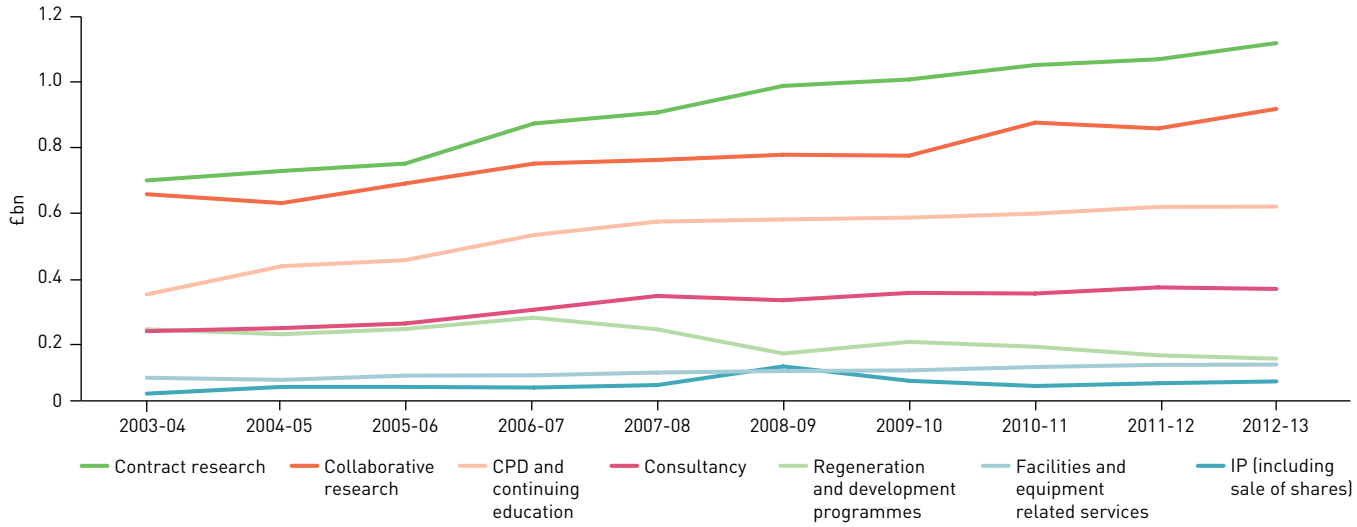
Source: HESA

Figure 28: Key HE-BCIS indicators – UK universities' knowledge exchange income, 2003–04 to 2012–13 (real terms)

Knowledge exchange income of UK universities, 2003–04 to 2012–13



Knowledge exchange income of UK universities, by type of activity, 2003–04 to 2012–13



Source: HESA

CONCLUSION

The data presented in this report shows how the UK higher education sector has changed in size and shape over the past decade, and during the first year of reformed funding arrangements for teaching across the UK. The overall trajectory from 2003–04 is initially one of growth, but with declines in the number of students towards the end of the period. In 2012–13, institutions were experiencing unprecedented changes to their mix of funding and were preparing for future uncertainty by diversifying their income, and ensuring sufficient margins for reinvestment (Figure 29).

The changes in the size and shape of UK higher education should also be seen in an international context. Data published by the OECD shows a 9% increase in the number of higher education students studying in the UK between 2003 and 2012. This may be regarded as a healthy growth rate, yet in the same period 18 other OECD countries grew their higher education student populations by a larger percentage, including the United States by 26%, Germany by 31% and Australia by 36%.[17] In addition the UK continues to spend less public money on higher education than most other OECD countries: 0.88% of GDP, below the OECD average of 1.13%.[18]

Despite the challenges of a dynamic and sometimes uncertain operating environment, the UK higher education sector can point to a number of indicators of success:

- Universities have achieved consistently high levels of student satisfaction. From around 80% in 2005, student satisfaction rose to 84% in 2012, 85% in 2013, and reached a new high of 86% in 2014.

- In research, while the UK has only 4.1% of the world's researchers, its share of global citations has been measured at 11.6%. The UK's share of the world's top 1% of most highly cited papers increased from 13.8% in 2010 to 15.9% in 2013, meaning the UK has now overtaken the United States to be ranked number one in the world by field-weighted citation impact.[19]

- Interactions in the field of innovation have grown strongly in recent years, with income from knowledge exchange activity up 45% in real terms over nine years.

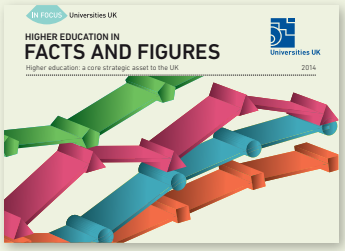
Many overseas governments are continuing to finance and implement bold strategies to develop their countries' higher education sectors and their position on the global stage. In this increasingly competitive international environment, the UK higher education sector will continue to work hard to maintain its position and attract the staff, students, funding and partnerships that are central to its success.

Figure 29: Annual percentage change in students, staff and income, 2006–07 to 2012–13

Source: HESA

17. OECD online statistics, published at www.oecd.org/statistics
18. OECD (2014) *Education at a Glance 2014*
19. Elsevier, for BIS (2013) *International Comparative Performance of the UK Research Base – 2013*

Other titles in the *Higher education in focus* series can be downloaded from the Universities UK website, www.universitiesuk.ac.uk



Higher education in facts and figures (November 2014)

The impact of initial teacher training reforms on English higher education institutions (October 2014)

International students in higher education: the UK and its competition (September 2014)

Trends in undergraduate recruitment (August 2014)

Research and postgraduate research training (June 2014)

Patterns and trends in UK higher education (December 2013)

Higher education in focus

Universities UK's *Higher education in focus* series covers additions to the evidence base to inform higher education policy development, and is the brand of Universities UK's analytical unit. The series includes the unit's in-house analysis and research, external research that the unit has commissioned, and data visualisations and infographics by the unit.

This publication has been produced by Universities UK, the representative organisation for the UK's universities. Founded in 1918, its mission is to be the definitive voice for all universities in the UK, providing high quality leadership and support to its members to promote a successful and diverse higher education sector. With 133 members and offices in London, Cardiff and Edinburgh, it promotes the strength and success of UK universities nationally and internationally.

Woburn House 20 Tavistock Square London WC1H 9HQ

Tel: +44 (0)20 7419 4111
Email: info@universitiesuk.ac.uk
Website: www.universitiesuk.ac.uk
Twitter: @UniversitiesUK

ISBN: 978-1-84036-330-2

December 2014

To download this publication, or for the full list of Universities UK publications, visit www.universitiesuk.ac.uk

Universities UK

In collaboration with

HESA
HIGHER EDUCATION STATISTICS AGENCY

BACK UNIVERSITIES
www.backuniversities.org.uk

Designed and typeset by Soapbox, www.soapbox.co.uk