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PATTERNS AND TRENDS

IN UK HIGHER EDUCATION

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HIGHER EDUCATION: A DIVERSE AND CHANGING SECTOR

In collaboration with

Universities UK

HESA
HIGHER EDUCATION STATISTICS AGENCY

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Foreword

The activities of staff and students in the UK's universities generate a wide range of benefits with impacts on the economy, society, and the nation's cultural life. Each of the three principal activities of universities – education, research, and innovation – has impacts that spread well beyond the immediate time and place in which they occur. The benefits are of such scale that the higher education sector has become a core strategic asset to the UK.

In this context it is important to monitor and understand the size and shape of higher education as it evolves. This year's *Patterns and trends* report, part of an annual series, continues that work by taking the story up to academic year 2011–12. It presents a range of data that shows how the higher education sector has been changing and adapting in a dynamic external environment.

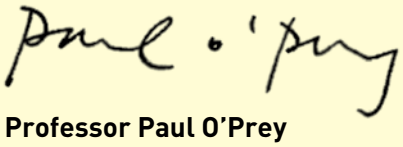
At the end of this period universities were engaged with a wide range of major challenges: they were preparing for reforms to funding of undergraduate education which would take effect the following year; constraints on public funding were already being felt before any higher tuition fee income had arrived; and implementation of the government's reforms to the student immigration system had begun. Inevitably predictions about the future of UK higher education ranged widely, but in general terms universities were preparing for uncertain times ahead.

The three main sections of this report focus on students, staff and finances. While the detailed breakdowns of data show a variety of trends, overall there is a general trajectory of growth initially, but with some important changes at the end of the period. In the last year, the total student population slightly declines in size, in the last two years the number of staff goes down, and growth in income slows such that it starts to lose pace against inflation. Through effective financial management, and the achievement of significant efficiencies, universities have been able to withstand these challenges and continue to focus on achieving excellent outcomes.

At the same time, we should not lose sight of the growth of higher education in competitor nations. While the UK saw strong growth in student numbers during the first decade of this century, many developed nations had higher education sectors that were growing just as fast, if not faster. A strong supply of highly-qualified graduates into the workforce is essential for the UK economy in the face of strengthening global competition.

While this report focuses on the national picture, an online annexe (available on the Universities UK website, www.universitiesuk.ac.uk) presents information about the diversity of the UK higher education sector. These charts show how higher education institutions vary in their size and shape, as reflected in their student and staff populations and financial positions.

Patterns and trends aims to provide useful information for all those with an interest in the UK higher education sector. For example, it might provide convenient reference material to aid strategic planning, or prompt policy debate about the challenges facing the sector. It is just one part of the work that is being undertaken by Universities UK to review the impact of changes in higher education. Further detailed investigations can be found in two reports, *The power of part-time: Review of part-time and mature higher education*, and *The funding environment for universities: an assessment*, both published in 2013.



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

Introduction

This report describes recent patterns and trends in UK higher education up to the academic year 2011–12. Most of the data used in this report 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 increase in the fee cap for full-time UK and EU undergraduates at universities in England came into effect for new students starting courses the year after the period covered in this report, and changes were made at the same time to arrangements in Scotland, Wales and Northern Ireland. These reforms were rightly identified as significant changes for UK higher education. However, as the data presented here shows, higher education institutions were already operating in a dynamic environment. A challenge remains to understand the significance of changes from year to year, in order to identify emerging trends. This report aims to aid our understanding of changes in UK higher education by presenting time series data for a range of key measures.

Note on data

In 2011–12 there were 163 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 the Universities UK website at:

www.universitiesuk.ac.uk/highereducation/Pages/PatternsAndTrendsInUKHigherEducation2013.aspx

CHAPTER 1:

STUDENTS

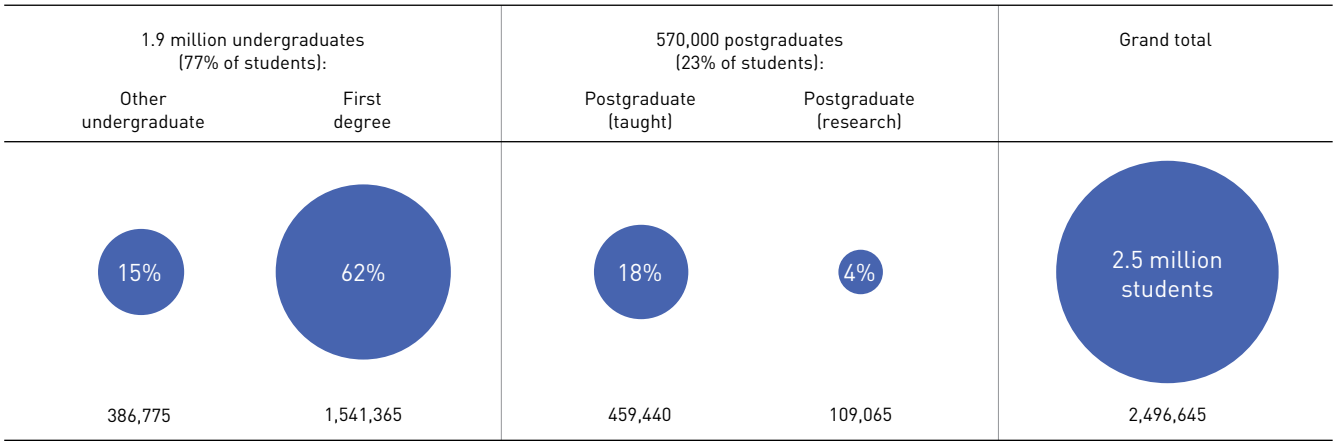
1.1 Higher education students in the UK

There were around 2.5 million students registered to study at the UK's 163 higher education institutions in 2011–12. As Figure 1 shows, undergraduates can be divided into two groups: those studying first degrees (over 1.5 million students) and those studying other undergraduate degrees (nearly 400,000 students). The latter group includes students studying towards qualifications such as foundation degrees, higher national certificates, and higher national diplomas. Figure 1 also shows that postgraduates made up a significant proportion of the total student population, with over 450,000 studying towards taught degrees and over 100,000 postgraduate research students.

These 2.5 million students registered with higher education institutions either study at their home institution, or their programme is delivered by a partner organisation such as a further education college or another provider. In addition, there were 180,000 students registered directly with a further education institution to study a higher education qualification.

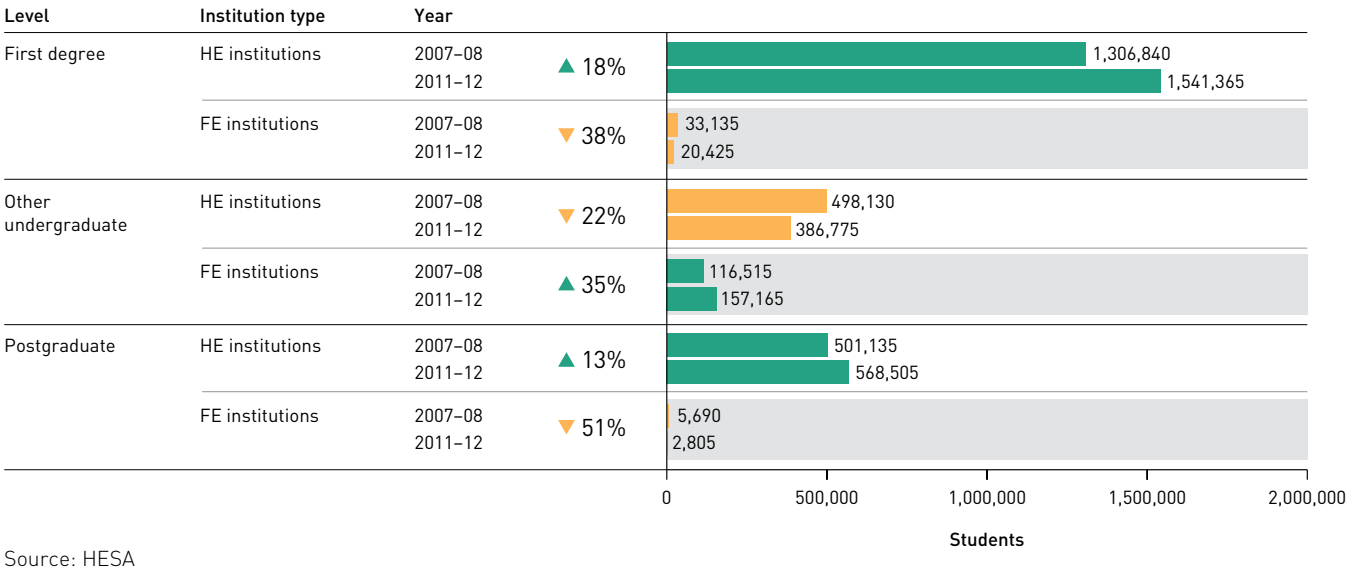
There have been contrasting trends in student numbers by level of study (Figure 2). The number of other undergraduates registered at further education institutions grew, but the number of first degree students and postgraduates fell. The pattern reverses at higher education institutions: other undergraduate numbers were down, but first degree and postgraduate student numbers were up.

Figure 1: Students at UK higher education institutions, 2011–12



Source: HESA

Figure 2: Higher education students by institution type, 2007–08 and 2011–12



Source: HESA

Higher education is also delivered by a range of alternative or 'private' providers. Data on this sector is more limited, however a study by the Department for Business, Innovation and Skills (BIS) identified 674 providers in the UK, and estimated that 160,000 students were undertaking higher education at these providers in 2011–12. Most providers were relatively small: over 200 providers had fewer than 100 higher education students each, and only five providers had over 5,000 higher education students. The data returns suggest that 60% of higher education students at alternative providers were studying full time and 22% part time, with 18% studying via distance learning; just under half were from the UK, 10% from elsewhere in the EU, and 41% from non-EU countries.[1]

A notable change in this sector has been an increase in the number of students accessing student support (including maintenance grants and loans, and Disabled Students' Allowance). In 2006–07, 3,280 English and EU students at 64 alternative providers took out some form of student support. By 2010–11, this had grown to 5,860 students at 94 providers, and 12,240 students at 110 providers the next year.[2] This increase reflects the direction of government policy signalled in the 2011 Higher Education White Paper.

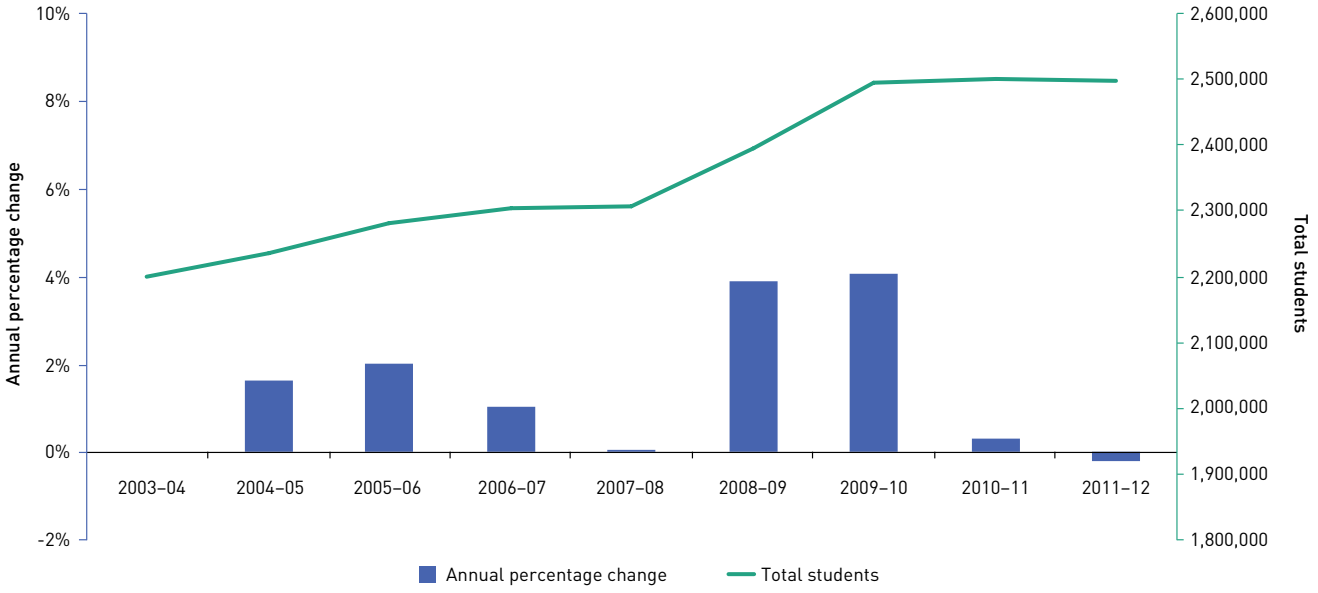
This report will focus on higher education provision in the UK. However, it is also relevant to note the involvement of the UK higher education sector in transnational education. In 2011–12, there were 570,665 students studying outside the UK who were either registered with a UK higher education institution, or who were 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 the higher education provision that is delivered by higher education institutions in the UK. Therefore data for the other types of higher education provision noted above is not included in the rest of the figures presented here.

1.2 The total number of students at higher education institutions

During the period 2003–04 to 2011–12, the total number of higher education students at higher education institutions in the UK increased by almost 300,000, or 13.5%. However, the rate of change fluctuated within the period: 2009–10 saw the largest year-on-year increase, of 4.1%, and 2011–12 was the only year that the total student population decreased in this period, by 0.2% (Figure 3; these figures are for students in all years of study). This change in direction from growth to a slight reduction in student numbers will be explored in the rest of this chapter.

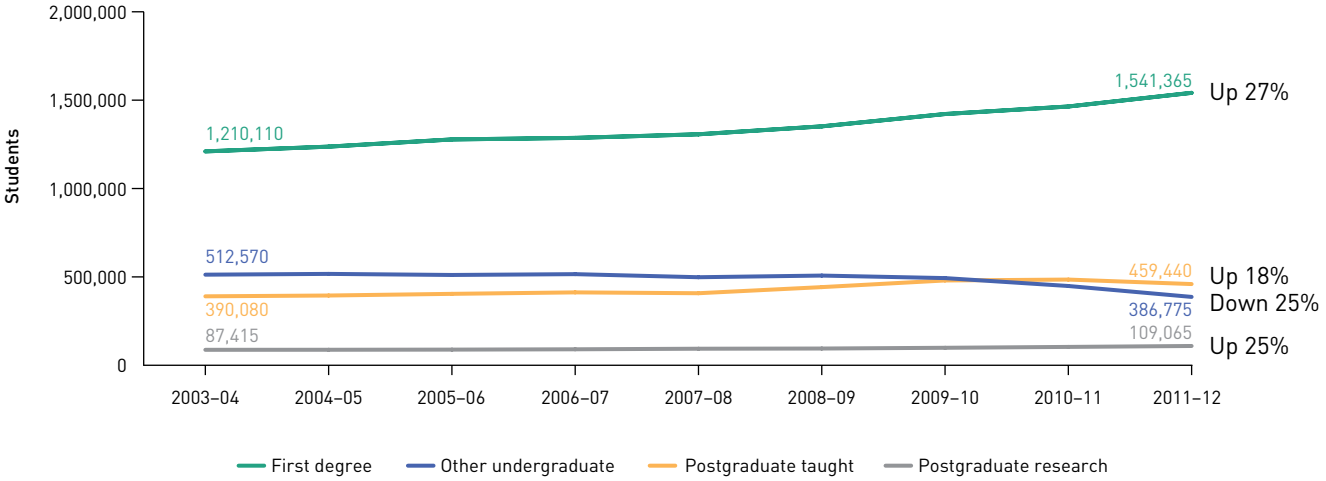
Figure 3: Total number of students, 2003–04 to 2011–12



Source: HESA

1. BIS (2013) *Privately funded providers of higher education in the UK* pp.7–8
2. BIS consultation 'Applying Student Number Controls to Alternative Providers with Designated Courses', November 2012, p.23
3. HESA Aggregate Offshore Student Record (2011–12)

Figure 4: Students by level of study, 2003–04 to 2011–12



Source: HESA

Between 2003–04 and 2011–12 there were contrasting trends by level of study (Figure 4): the strongest percentage growth was at first degree level, followed by postgraduate research and then postgraduate taught levels, while the only group that decreased across the period was other undergraduates (who were studying towards a range of qualifications, including foundation degrees, higher national certificates, and higher national diplomas).

The breakdown by level of study illustrates how growth in one area can offset reductions elsewhere (Table 1). For example, in 2010–11, overall growth is just 0.3%, suggesting a relatively stable position. But within this a reduction of 9.1% in other undergraduates is offset by growth in all other levels of study. The decline in other undergraduates continues the next year (a drop of 13.8%), but there is also a reduction of 5.2% in the number of postgraduate taught students. These reductions in 2011–12 are partly but not fully offset by growth in the number of first degree and postgraduate research students.

The postgraduate taught population encompasses a diverse range of provision, but it is interesting to note that the strongest increases in the population (in 2008–09 and the following year) coincided with the beginning of the economic downturn. However, a much wider range of factors is almost certainly at play, shaping year-to-year volatility in total numbers.

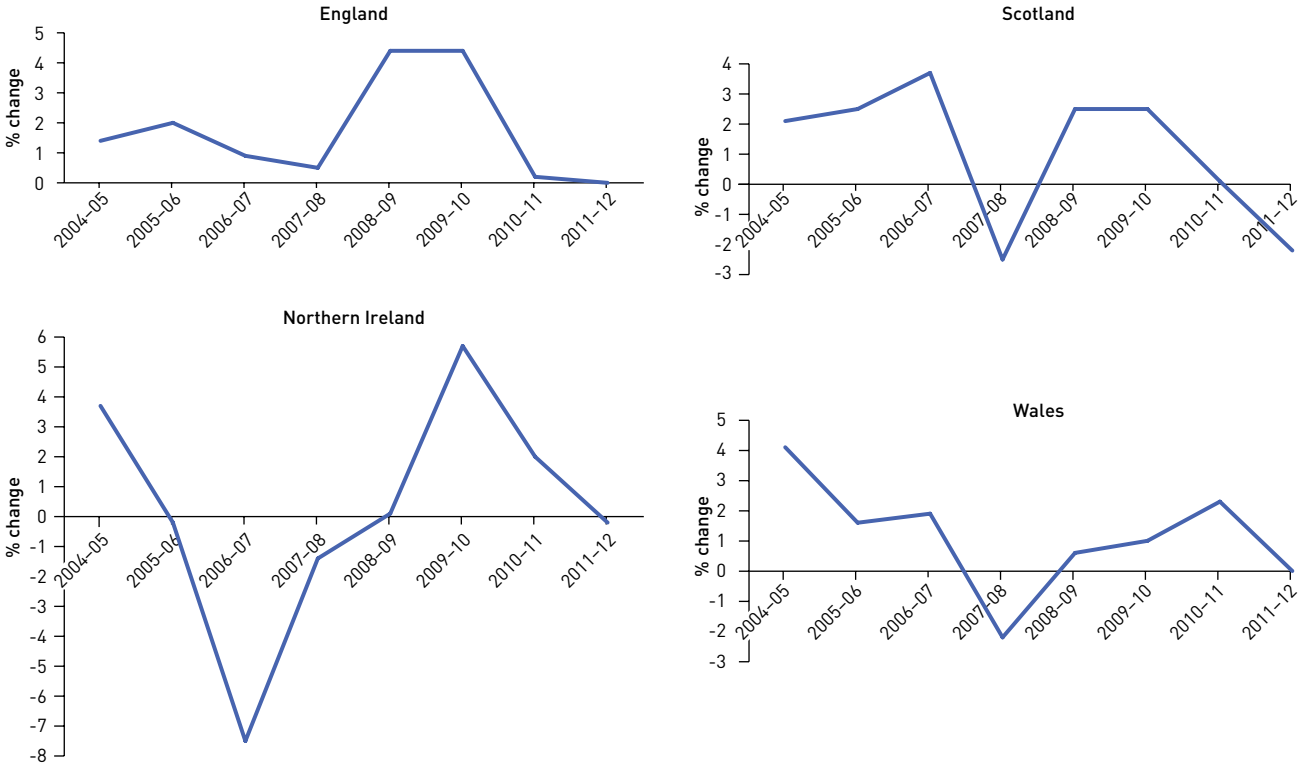
Changes in overall student numbers vary between each of the nations within the UK, as shown in Figure 5. Like the UK as a whole, these changes in total populations from year to year will be shaped by a range of factors, from changes in policy at a national level to fluctuating levels of student demand in different localities and subject areas.

Table 1: Annual change in student population by level of study, 2004–05 to 2011–12

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12
Other undergraduate	0.9%	-1.2%	0.9%	-3.4%	1.9%	-2.8%	-9.1%	-13.8%
First degree	2.2%	3.3%	0.7%	1.6%	3.4%	5.2%	3.0%	5.3%
Postgraduate (taught)	1.2%	2.4%	2.0%	-1.2%	8.5%	8.5%	1.1%	-5.2%
Postgraduate (research)	0.3%	1.0%	2.1%	3.5%	1.2%	4.5%	5.0%	5.0%
Total	**1.6%**	**2.0%**	**1.0%**	**0.1%**	**3.9%**	**4.1%**	**0.3%**	**-0.2%**

Source: HESA

Figure 5: Annual change in student population by country of institution, 2004–05 to 2011–12



Source: HESA

1.3 Changes in part-time and full-time study

Figure 6 highlights changes in the student population by mode of study. At an aggregate level, full-time provision grew while part-time provision slightly shrank in the period 2003–04 to 2011–12. As a result, the proportion of students studying full time increased, from 62% in 2003–04, to 69% in 2011–12.

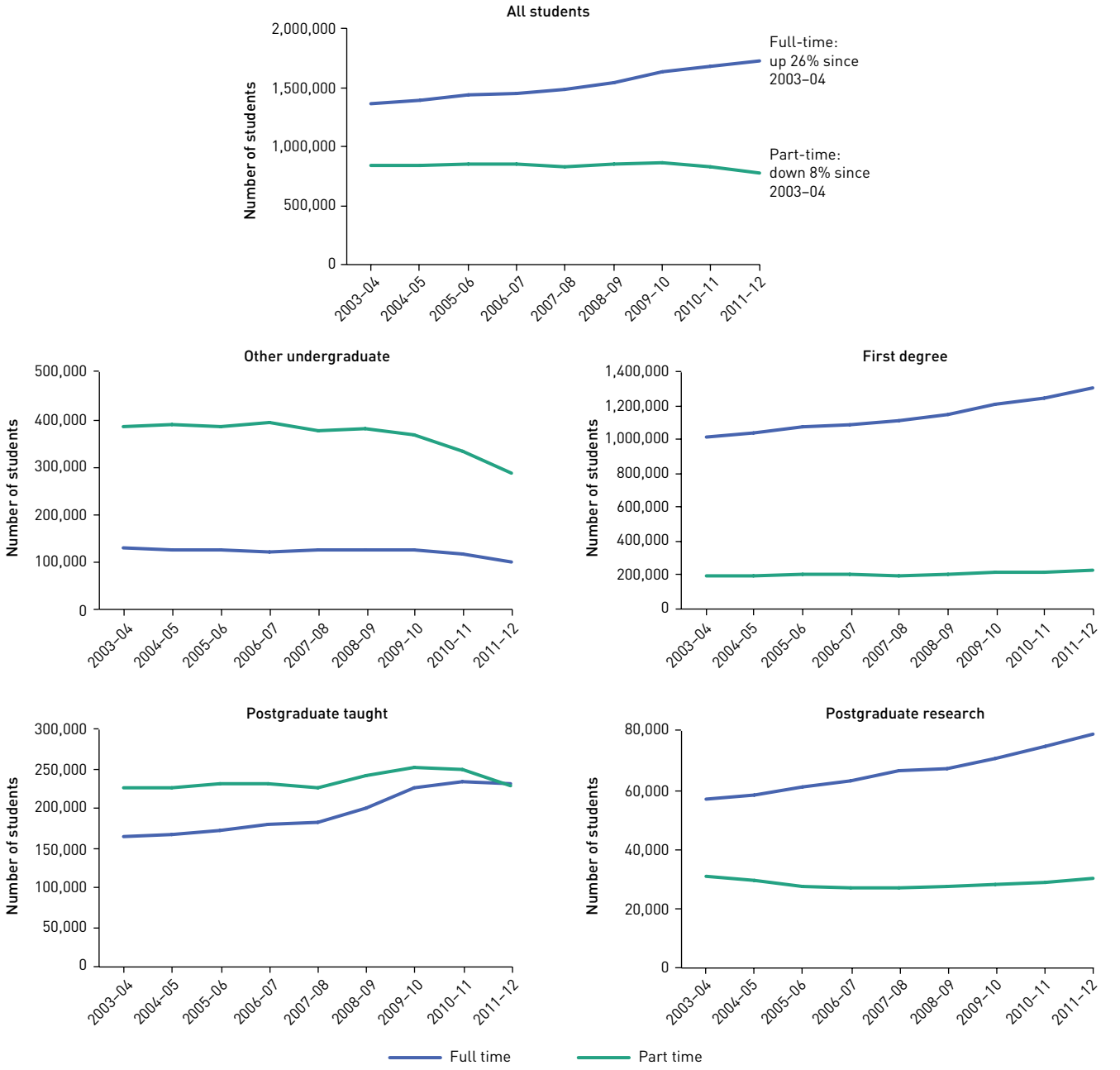
Mode of study appears to be an important factor in understanding how the 2011–12 population changed compared to the previous year: between these two years the number of full-time students increased by over 44,000 but the number of part-time students decreased by over 48,000. Decreases in other undergraduates and postgraduate taught students occurred in both modes of study, but with more of the decrease occurring at part-time level. At the same time there were increases in first degree and postgraduate research students, with larger increases among full-time than part-time students.

Looking across the period 2003–04 to 2011–12, there are noticeable differences in the numbers of part-time and full-time students by level of study. There is a decline in other undergraduates at both part-time and full-time level, but the majority of students in this group study part time. By contrast a large majority of first degree students are full time, but there has been growth in both modes of study across the period. At postgraduate taught level, part-time students are in the majority until 2011–12, whereas the number of full-time students only just exceeds the number of part-time students for the first time in the period under consideration. At postgraduate research level, growth in full-time students is similarly strong when measured as a percentage, while part-time student numbers slightly decline.

One area that has witnessed significant change is participation by UK-domiciled undergraduate part-time students. Between 2002–03 and 2011–12, the number of UK-domiciled part-time undergraduate entrants decreased by 11%. This contrasts strongly with the 17% increase in UK full-time undergraduate entrants. The number of part-time undergraduate entrants declined in all four nations of the UK in this period, but with the largest decrease occurring in England. Initial indications suggest part-time undergraduate provision reduced considerably further in 2012–13. The Higher Education Funding Council for England (HEFCE) found that the number of part-time undergraduates starting a course in England fell from around 230,000 in 2011–12 to around 154,000 in 2012–13.[4] In October 2013, Universities UK published *The power of part-time: Review of part-time and mature higher education* which explores part-time undergraduate provision in more detail.

4. HEFCE (2013) *Higher education in England: Impact of the 2012 reforms* p.13

Figure 6: Students by level and mode of study, 2003–04 to 2011–12

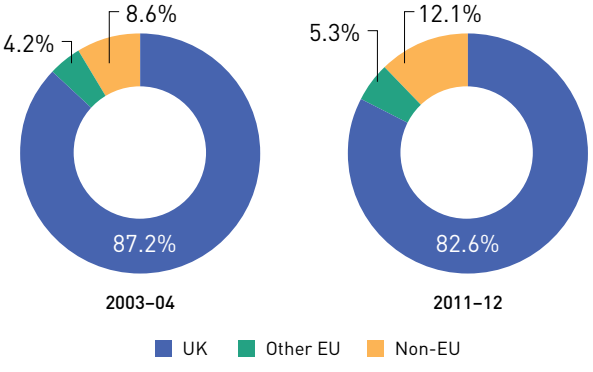


Source: HESA

1.4 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 2011–12 this had risen to 12.1% (Figure 7). In addition, the proportion of students from the rest of the EU increased from 4.2% to 5.3% across the same period. However, even after these increases, international students continue to make up a relatively small proportion of total students.

Figure 7: Students by domicile, 2003–04 and 2011–12



Source: HESA

A broad trend of growth is evident throughout the period, and in 2011–12 the number of non-EU students increased by 1.5% on the previous year. However, the number of first years slightly reduced, from 174,225 in 2010–11 to 173,560 in 2011–12. The number of non-EU entrants studying science, technology, engineering and mathematics (STEM) subjects fell by almost 8% in 2011–12.

Within each level of study the pattern varies (Figure 8). At first degree level, non-EU students grew in number by almost 53,000 between 2003–04 and 2011–12, but remained a small share of a much larger population: in 2003–04, non-EU students represented just 5.9% of all first degree students, rising to 8.1% in 2011–12. At postgraduate taught level, the increase was similar in numerical terms, with the non-EU population expanding by nearly 55,000. 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 28.2%. The proportion varies quite widely between subjects. For example, 51% of all postgraduate taught computer science students are non-EU, whereas this figure is 29% in the physical sciences. Fluctuations in demand from non-EU students may therefore have a particular impact on certain courses with typically lower levels of home and EU student enrolments.

Figure 8: Students by domicile and level of study, 2003–04 and 2011–12

	UK		Other EU		Non-EU	
	2003–04	2011–12	2003–04	2011–12	2003–04	2011–12
Other undergraduate	483,925	359,920	9,470	9,120	19,180	17,730
Percentage share	94.4%	93.1%	1.8%	2.4%	3.7%	4.6%
First degree	1,095,375	1,342,690	42,935	73,965	71,805	124,710
Percentage share	90.5%	87.1%	3.5%	4.8%	5.9%	8.1%
Postgraduate (taught)	286,120	294,295	29,130	35,405	74,830	129,740
Percentage share	73.3%	64.1%	7.5%	7.7%	19.2%	28.2%
Postgraduate (research)	53,260	64,505	10,640	14,060	23,510	30,500
Percentage share	60.9%	59.1%	12.2%	12.9%	26.9%	28.0%
Totals	1,918,680	2,061,410	92,175	132,550	189,325	302,680

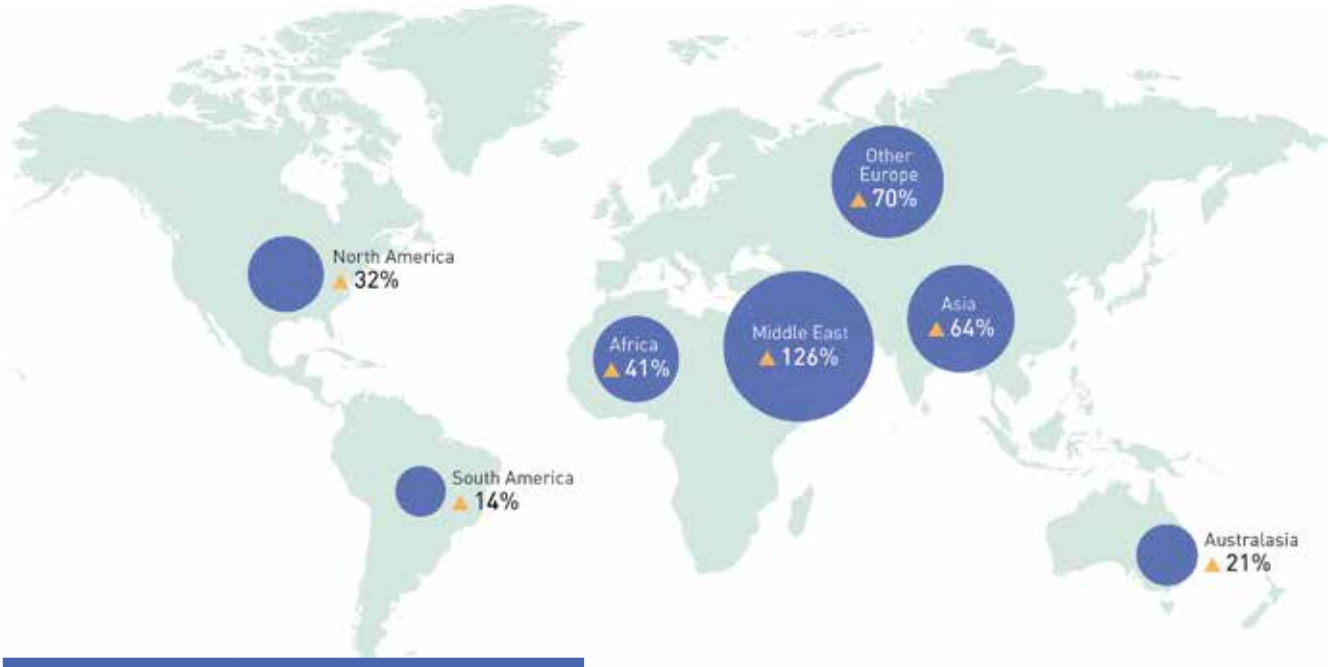
Source: HESA

The broad subject area attracting the most non-EU students across all levels of study was business and administrative studies in both 2003–04 and 2011–12. The popularity of this subject area grew significantly, with the number of non-EU students more than doubling from over 50,000 to over 102,000; in the same period the number of non-EU engineering and technology students grew from nearly 24,000 to nearly 39,000. Many other areas also saw substantial increases, with the number of non-EU students rising by over 50% in 14 out of the 19 high-level subject areas identified by JACS codes.

Figure 9 shows the international regions from which students came to study in the UK. At this regional level, the largest number of non-EU students were domiciled in Asia, and within this group, a little over half came from China or India. The region with the largest percentage growth between 2003–04 and 2011–12 was the Middle East, although this was from a lower base. While Figure 9 indicates broad trends, recruitment from year to year can vary widely, especially at a country level. For example, in 2011–12 the number of students from China was up 17% on the previous year, while the number from India was down 24%.

UK higher education has strengthened its position in an international context. In 2000, the UK had a 10.8% share of the global market for students studying abroad, and by 2011 this had grown to 13.0% (Figure 10).[5] International students boost the economy: in 2011–12 it is estimated that international students spent £10.2 billion on tuition fees and living expenses. As the government's international education strategy also acknowledges, international students enhance the UK's cultural life and broaden the educational experience of the students they study alongside.[6]

Figure 9: Change in non-EU students by region of origin, 2003–04 and 2011–12

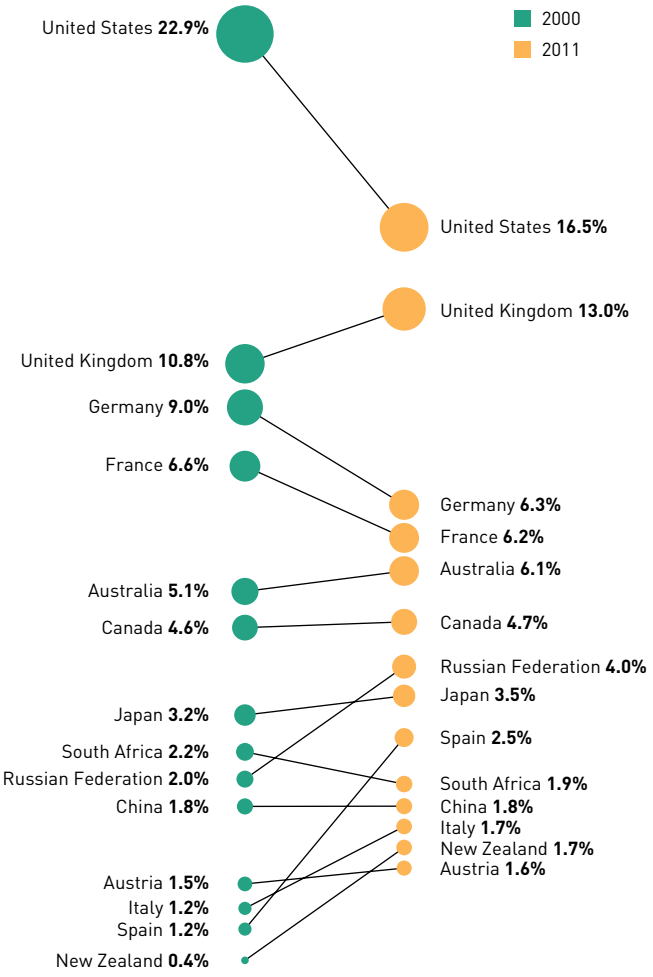


	2003–04	2011–12
Asia	114,700	188,525
Africa	25,025	35,255
North America	20,540	27,100
Middle East	11,775	26,645
Other Europe	10,495	17,890
South America	3,595	4,090
Australasia	2,055	2,475

Source: HESA

5. OECD (2013) *Education at a Glance 2013* Table C4.7
6. HM Government (2013) *International Education: Global Growth and Prosperity* p.3

Figure 10: Shares of international student market, 2000 and 2011



Source: OECD (2013) *Education at a Glance*

1.5 Gender and age profiles

In 2011–12, 56% of students were female. Within this, there was some variation by level of study: at first degree level around 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: 79% of students from Pakistan were male, but just 30% of students from Taiwan were male.

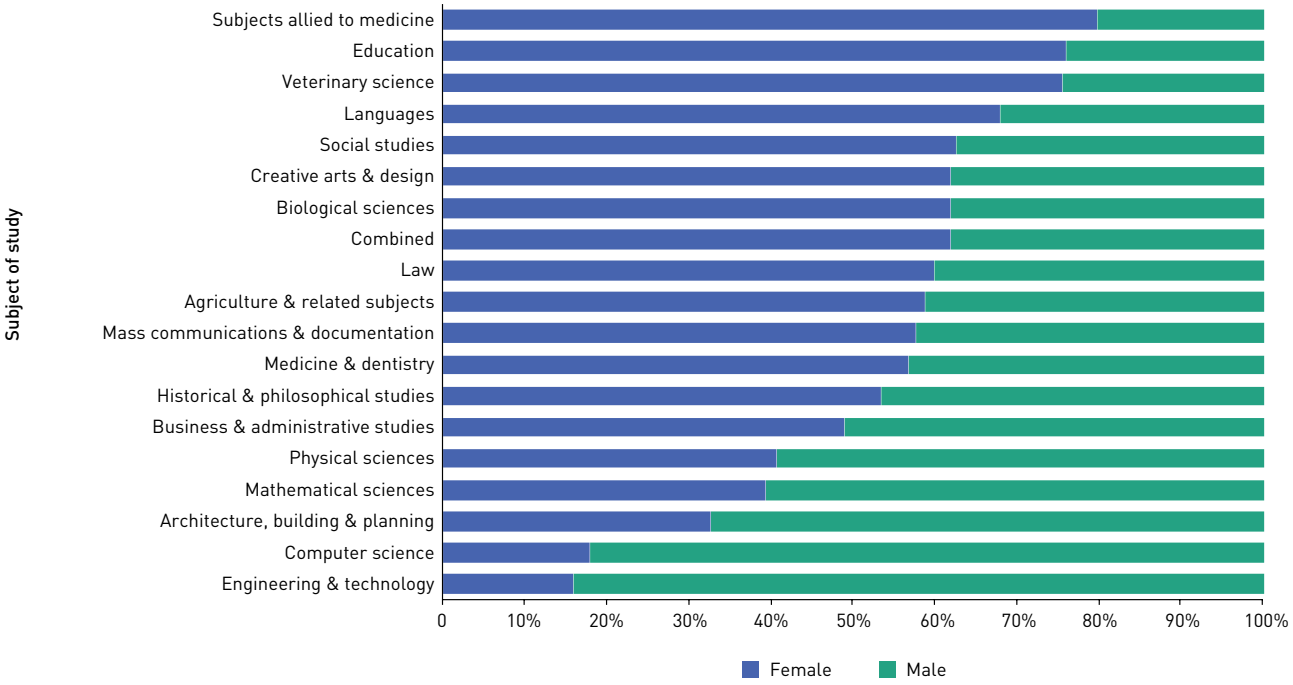
In addition, there was substantial variation in the proportions by gender between different subjects of study (Figure 11). It is beyond the scope of this report to explore the reasons for these differences, but the wide variation by gender between subjects is a striking feature of the student population.

Table 2: Gender of students by domicile, 2011–12

	Percentage of female students
UK students	57.7%
Other EU students	53.7%
Non-EU students	48.0%

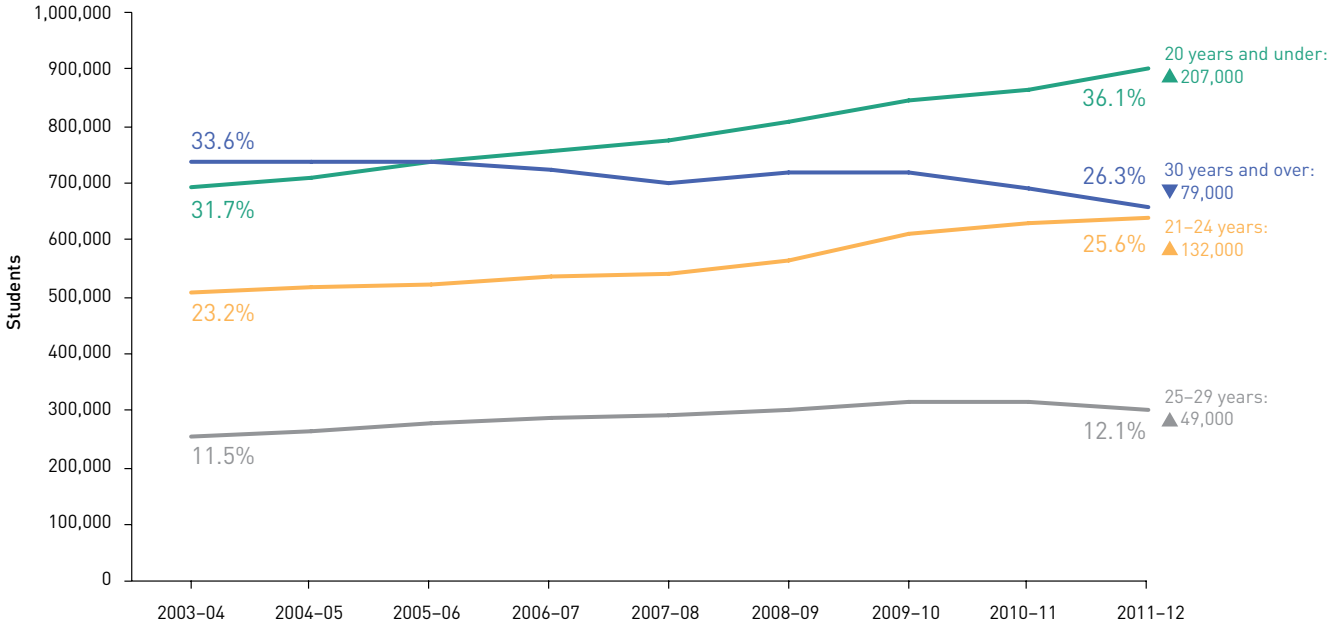
The number of students aged under 30 increased by 388,000 between 2003–04 and 2011–12, while the number aged 30 and over decreased by 79,000. Figure 12 shows changes in the age of students in further detail, and Figure 13 shows year-on-year percentage change. The latter illustrates that while the number of students under 30 increased every year between 2003–04 and 2011–12, the number of students over 30 did not always decrease each year despite the overall trend noted above.

Figure 11: Students by subject of study and gender, 2011–12



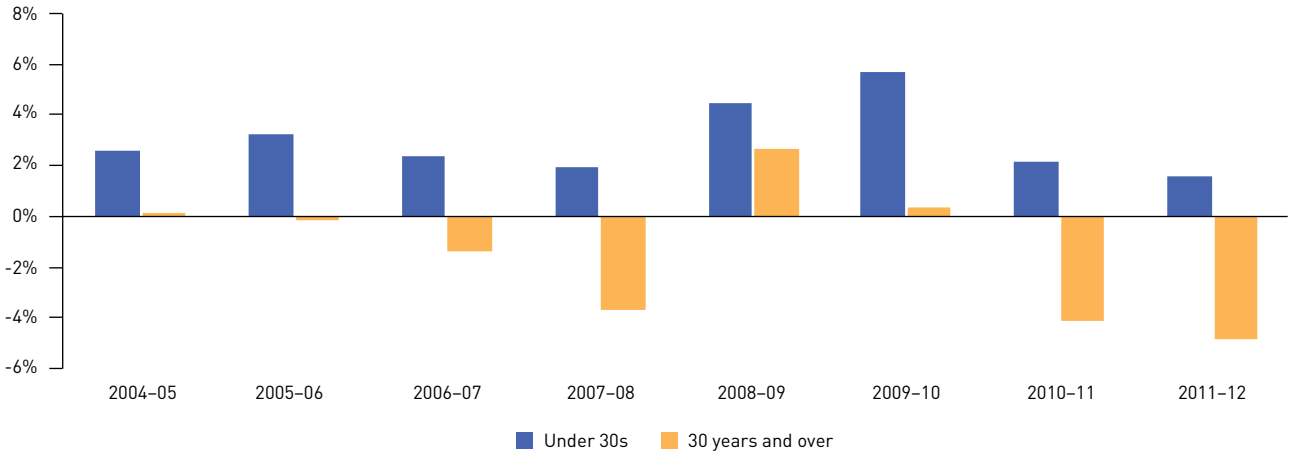
Source: HESA

Figure 12: Students by age group, 2003–04 to 2011–12



Source: HESA

Figure 13: Annual change in students by age group, 2004–05 to 2011–12



Source: HESA

1.6 Subject choice

As noted in section 1.2, the total number of students increased by 13.5% between 2003–04 and 2011–12, but changes at the level of broad subject groups over the same period varied widely. In percentage terms, the largest increase was in mathematical sciences (43.4%) and the largest decrease was in computer science (29.3%; see Table 3). The three subjects with the largest increases in absolute numbers were business and administrative studies, biological sciences, and creative arts and design. 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 a dynamic environment.

Table 3: Students by subject of study, 2003–04 and 2011–12

	2003–04	2011–12	Change	Percentage change
Mathematical sciences	30,105	43,170	13,065	43.4%
Agriculture & related subjects	14,830	21,165	6,335	42.7%
Veterinary science	3,935	5,575	1,635	41.6%
Biological sciences	143,660	199,275	55,620	38.7%
Physical sciences	70,265	94,955	24,690	35.1%
Medicine & dentistry	50,760	67,955	17,195	33.9%
Creative arts & design	139,130	182,085	42,955	30.9%
Engineering & technology	129,305	162,015	32,715	25.3%
Business & administrative studies	292,340	363,860	71,525	24.5%
Architecture, building & planning	47,000	58,355	11,355	24.2%
Mass communications & documentation	44,710	54,860	10,155	22.7%
Social studies	187,290	222,375	35,085	18.7%
Law	82,175	93,575	11,400	13.9%
Education	189,625	201,720	12,095	6.4%
Subjects allied to medicine	285,600	299,940	14,335	5.0%
Languages	132,625	135,985	3,365	2.5%
Historical & philosophical studies	99,055	99,165	110	0.1%
Combined	122,530	94,945	-27,585	-22.5%
Computer science	135,235	95,670	-39,565	-29.3%

Source: HESA

1.7 Outcomes and achievement

Between 2007–08 and 2011–12 the number of higher education qualifications awarded increased by 111,000 to a total of 787,000 (Figure 14). The number of postgraduate taught qualifications awarded grew by 31%, while the number of first degrees awarded grew by 17%.

Figure 14: Qualifications awarded by level, 2007–08 to 2011–12

Source: HESA

The Destinations of Leavers from Higher Education (DLHE) survey provides information on the activities of graduates six months after their course ends. At this early stage in their careers, 88.3% were working or studying (or both), 7.3% were unemployed, and 4.5% were engaged in other activity. (The survey results cannot be compared with results for previous years due to changes in methodology.)

Further evidence of the emerging career paths of graduates is provided in the longitudinal DLHE. The most recent survey asked 2008–09 graduates what they were doing in November 2012. As shown in Figure 15, the proportion that was unemployed had decreased, compared to the position after six months. The survey also showed that the median salary of UK-domiciled, full-time first degree leavers who were working full-time was £24,000 after three-and-a-half years. This compares with a median salary of £20,000 reported in the six-month early survey.

The evidence base that shows graduates, on average, benefit financially compared to those without a degree is continuing to grow. A recent government report shows female students who progress to university can expect to boost their lifetime earnings by £250,000. Male students can expect to increase their lifetime earnings by £165,000.[7] This report supplements existing international evidence of a graduate earnings premium: while there are differences between subjects and occupations, graduates earn more on average than workers who do not have a higher education qualification across the OECD group of nations.[8]

7. BIS (2013) *The impact of university degrees on the lifecycle of earnings*
8. OECD (2013) *Education at a Glance 2013*

In this international context, UK universities are critical to economic growth in this country through the graduates they educate. The UK workforce is becoming more highly qualified. For example, in 2002, 32.5% of 30 to 34-year-olds in the UK labour force had a higher education qualification; ten years later this figure was 51.0% (Figure 16).

Graduates will play a vital and growing role in the future development of the UK workforce: 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 17). This report has shown an overall trend of student numbers increasing during the period 2003–04 to 2011–12. Future trends in student numbers will have immediate impacts on higher education institutions; consequently they will shape the future supply of highly-skilled workers into the economy.

Figure 15: Activity of UK-domiciled 2008–09 graduates after six months and 3.5 years

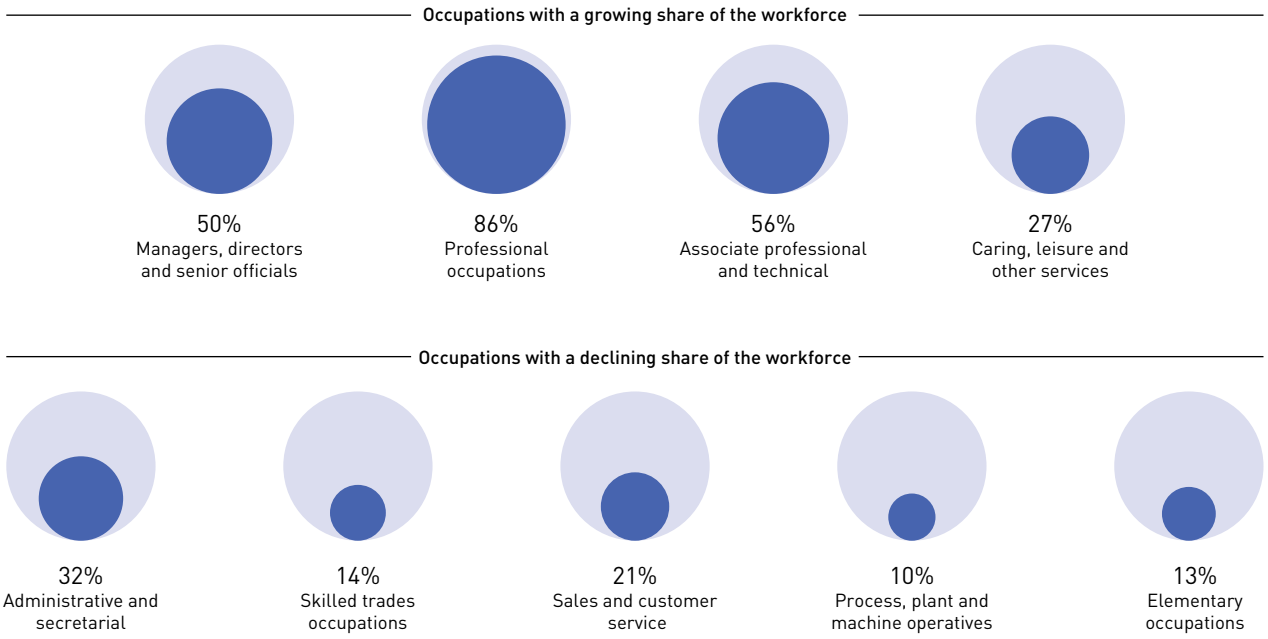
Activity	Time since graduation	
Working	After 6 months	73.4%
	After 3.5 years	87.1%
Further study	After 6 months	14.6%
	After 3.5 years	6.7%
Other	After 6 months	4.7%
	After 3.5 years	3.0%
Unemployed	After 6 months	7.2%
	After 3.5 years	3.2%

Source: HESA
Note: 'Working' includes those combining work and study

Figure 16: Percentage of UK population in employment with higher education qualifications by age, 2002, 2007 and 2012

Source: HESA from Labour Force Survey and Annual Population Survey

Figure 17: Percentage of graduates within occupations, 2013



Source: Labour Force Survey 2013 Q2 and UKCES (2012) *Working Futures 2010–2020*

CHAPTER 2:

STAFF

In 2011–12 there were 378,250 staff employed by higher education institutions, an increase of 12.9% since 2004–05. (This figure, and the rest of the analysis in this chapter, covers staff on open-ended or permanent contracts and fixed-term contracts unless otherwise stated. In addition, there were 187,865 'atypical' staff employed in 2011–12. The definition of 'atypical' includes staff employed on a temporary basis; further details of this definition can be found in the description of the staff record on the HESA website.)

Figure 18 shows the year-on-year change in the staff population on open-ended or permanent and fixed-term contracts. The net growth in staff numbers across this period totals 31,945, and 64.9% of this growth is attributable to an increase in academic staff. The changes are not uniform by subject area: Table 4 summarises changes in each of nine broad subject groupings across the period in question. UK universities attract academic staff from across the world in a competitive global employment market: in 2011–12, 14% of academic staff were from the rest of the EU, and 11% were of non-EU nationality.[9]

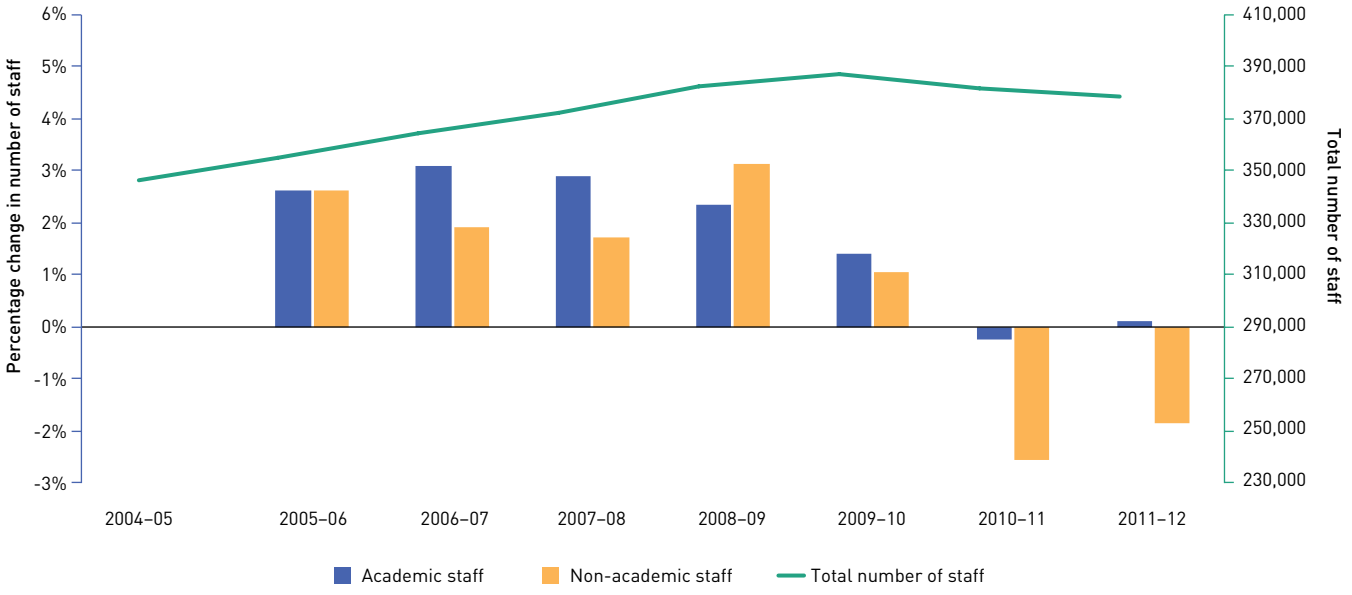
The profile of 'non-academic' staff has changed over time. This grouping spans a very wide range of roles, and is split into three categories in Figure 19. In the period from 2004–05 to 2009–10, the number of managerial, professional and technical staff grew

Table 4: Academic staff by subject area, 2004–05 and 2011–12

	2004–05	2011–12	Change	% change
Architecture & planning	2,975	3,845	870	29.3%
Design, creative & performing arts	11,505	14,260	2,755	24.0%
Administrative, business & social studies	28,910	34,925	6,015	20.8%
Medicine, dentistry & health	38,330	44,975	6,650	17.3%
Biological, mathematical & physical sciences	23,830	27,085	3,255	13.7%
Humanities & language based studies & archaeology	15,110	16,930	1,820	12.1%
Engineering & technology	21,120	21,215	95	0.4%
Agriculture, forestry & veterinary science	2,100	2,050	-50	-2.4%
Education	13,705	13,340	-365	-2.7%

Source: HESA

Figure 18: Staff by employment function, 2004–05 to 2011–12



Source: HESA

9. Percentages are those of staff with known nationality

quite strongly (up 20%), while the number of clerical staff grew less strongly (up 11%), and the number of manual staff slightly declined (by 4%). In the shorter period from 2009–10 to 2011–12 a different pattern emerges, with all three groups seeing a decline. However, the decline is largest in percentage terms among manual staff (down 7.6%), followed by clerical staff (down 6.4%), followed by managerial, professional and technical staff (down 1.1%). Across the whole period 2004–05 to 2011–12 there has been an overall increase in the number of non-academic staff in temporary (or 'atypical') roles of 28%.

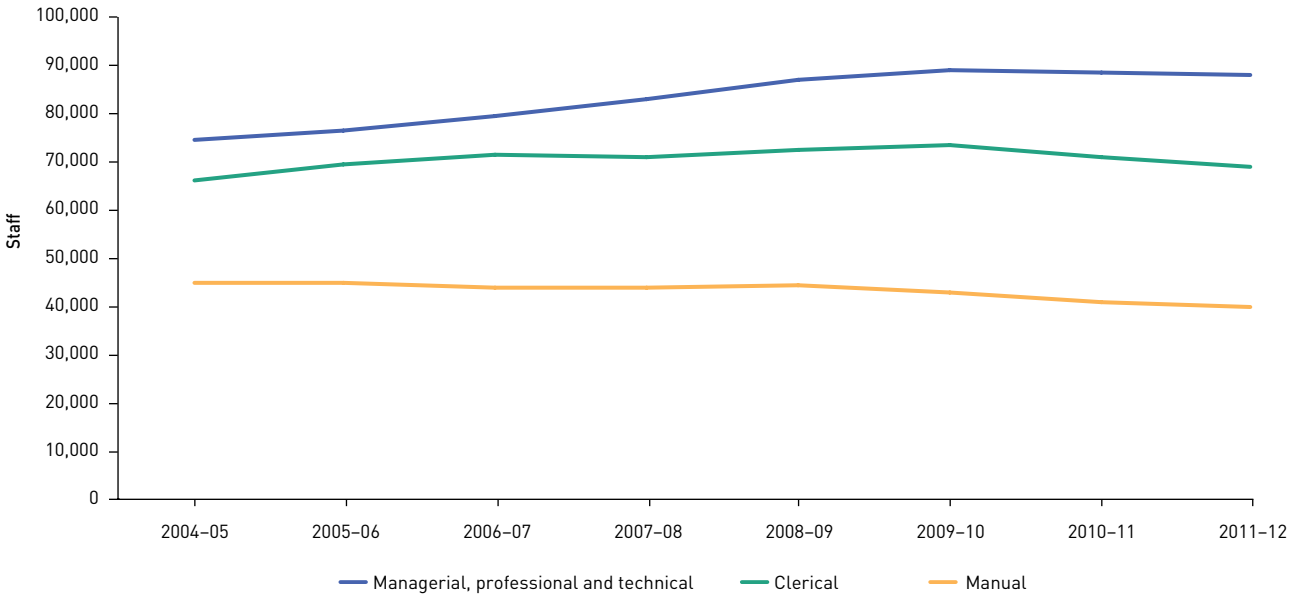
The emergence of these trends at a national level will be influenced by a wide range of factors, including changes in the needs and expectations of academic staff and students, and technological developments. The increasing professionalisation of support services in higher education is another factor possibly at play in the contrasting trends between the different groups. If this trend is a feature of higher education, it can also be compared to changes in the labour force as a whole, in which professional occupations occupy a growing share of the workforce (Figure 17). Any increases in outsourcing of particular functions would impact the profile of staff employed directly. The need to achieve cost savings is likely to account for at least some of the decrease in staff at the end of the period.

One important trend in recent years has been an increased focus on providing tailored student support. This is reflected by an increase of 42% in the number of staff employed in dedicated student support roles since 2004–05.

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 8,220 between 2004–05 and 2011–12 to reach a total of 117,850, while the number of part-time staff grew by 12,510 to reach a total of 63,540. As a result, the proportion of academic staff working part time grew from 32% to 35%.

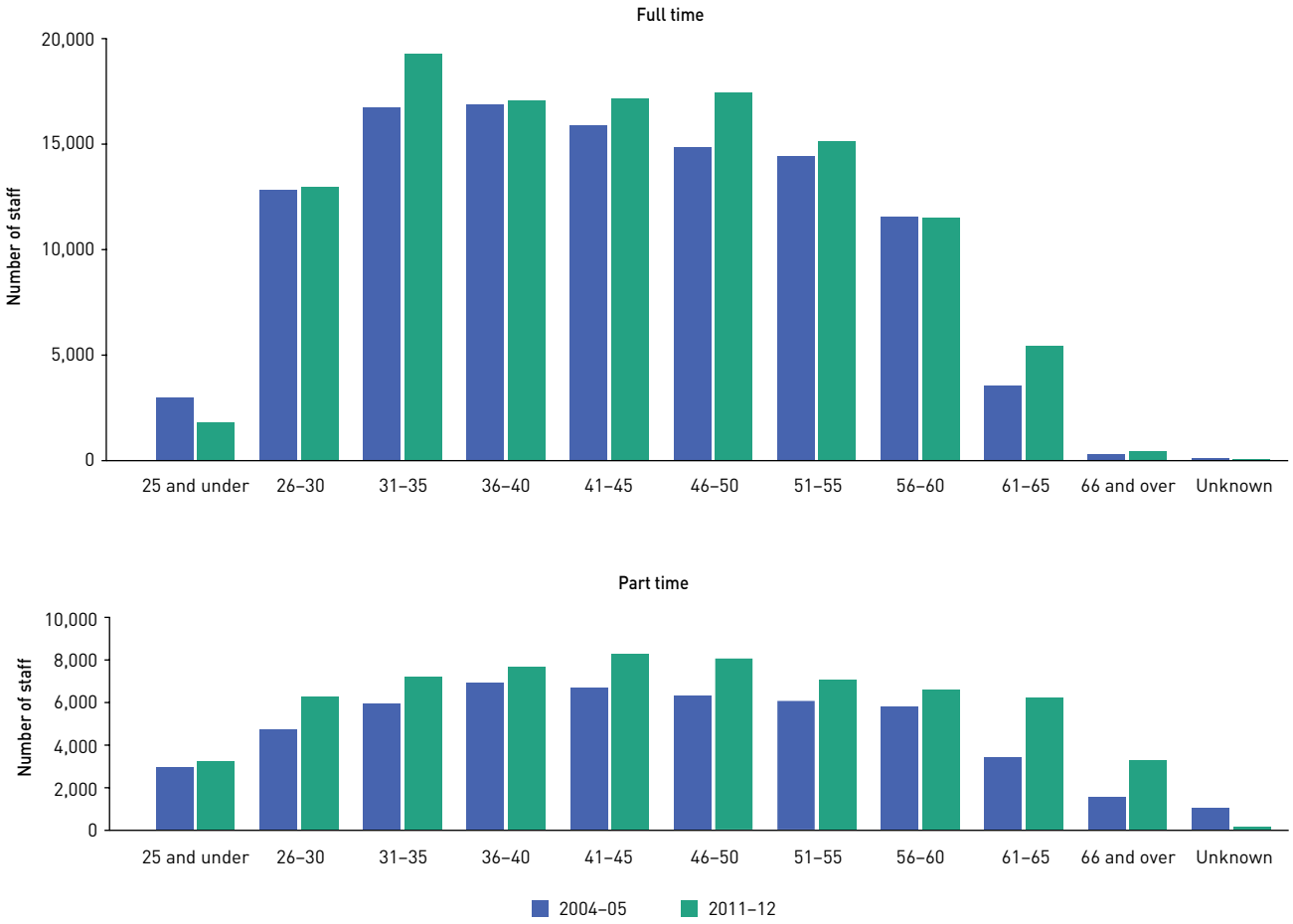
Figure 20 shows that the overall change in academic staff between 2004–05 and 2011–12 is not uniformly distributed by age group. The number of academic staff aged over 60 increases significantly, with most of the increase being among the number of part-time staff. Other groups showing changes include full-time academic staff aged 31 to 35 (up 2,535, or 15%), and full-time academic staff aged 46 to 50 (up 2,580, or 17%).

Figure 19: Non-academic staff by employment function, 2004–05 to 2011–12



Source: HESA

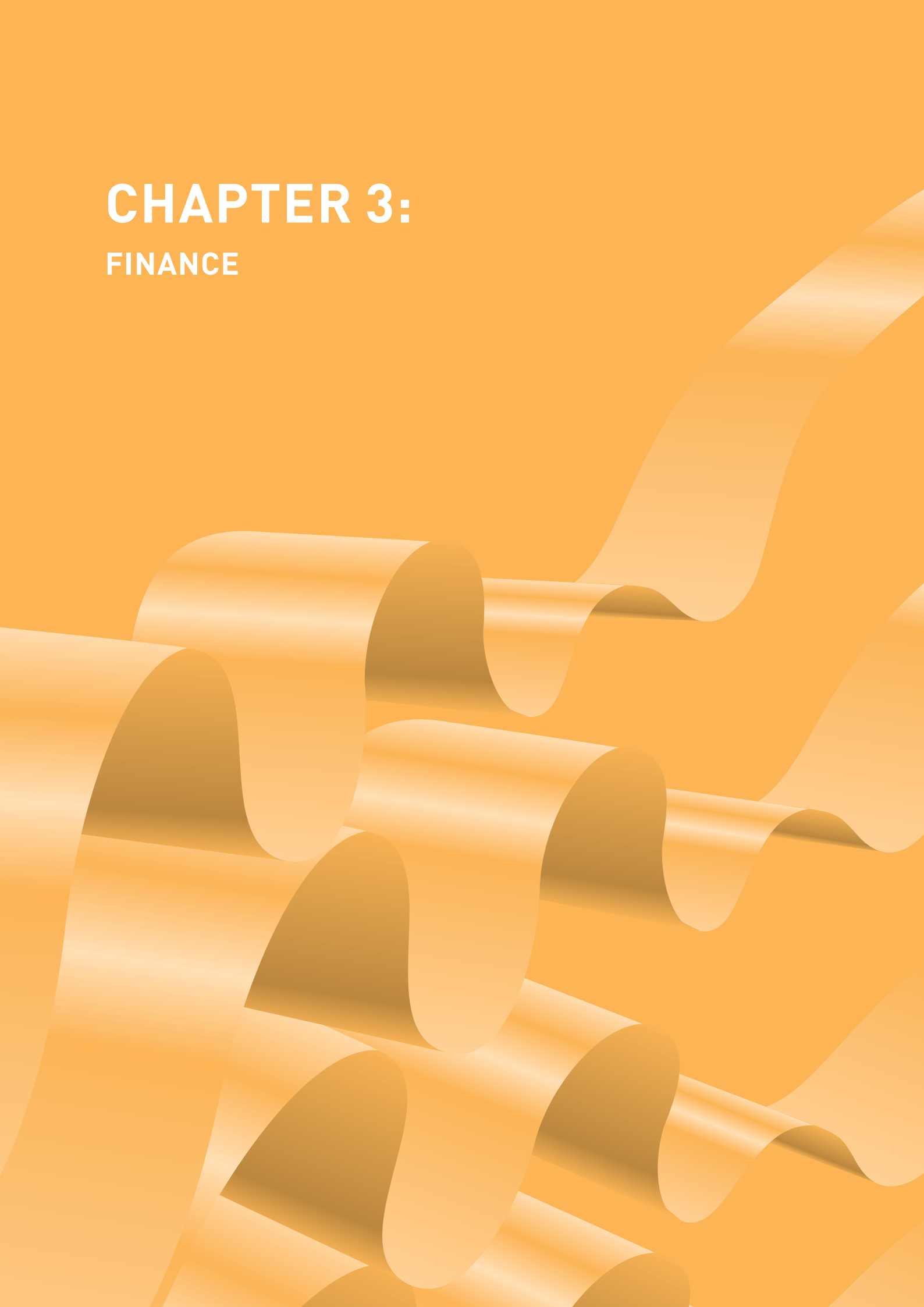
Figure 20: Change in age profile of academic staff between 2004–05 and 2011–12 by mode of employment



Source: HESA

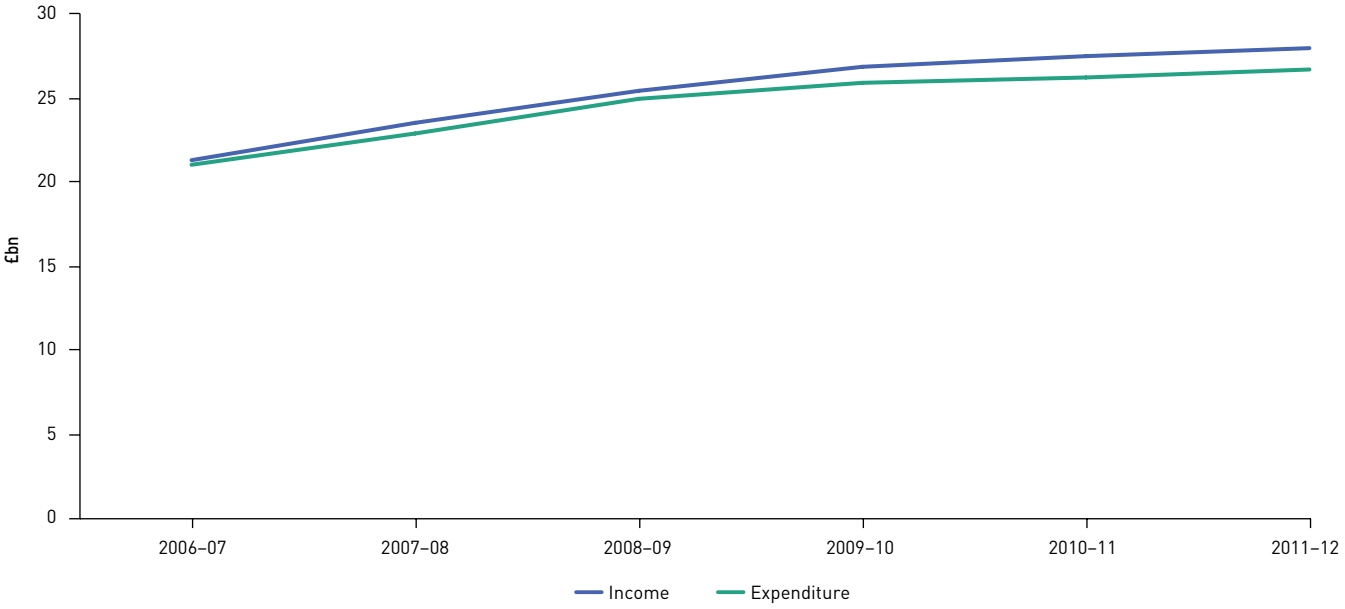
CHAPTER 3:

FINANCE



In 2011–12, the total income of the UK higher education sector was £27.9 billion, and total expenditure was £26.7 billion. The positive difference between net income and expenditure was therefore a 'surplus' of £1.2 billion, or 4.4% of income. As shown in Figure 21, the annual surplus has grown slightly since 2006–07.

Figure 21: Total income and total expenditure, 2006–07 to 2011–12



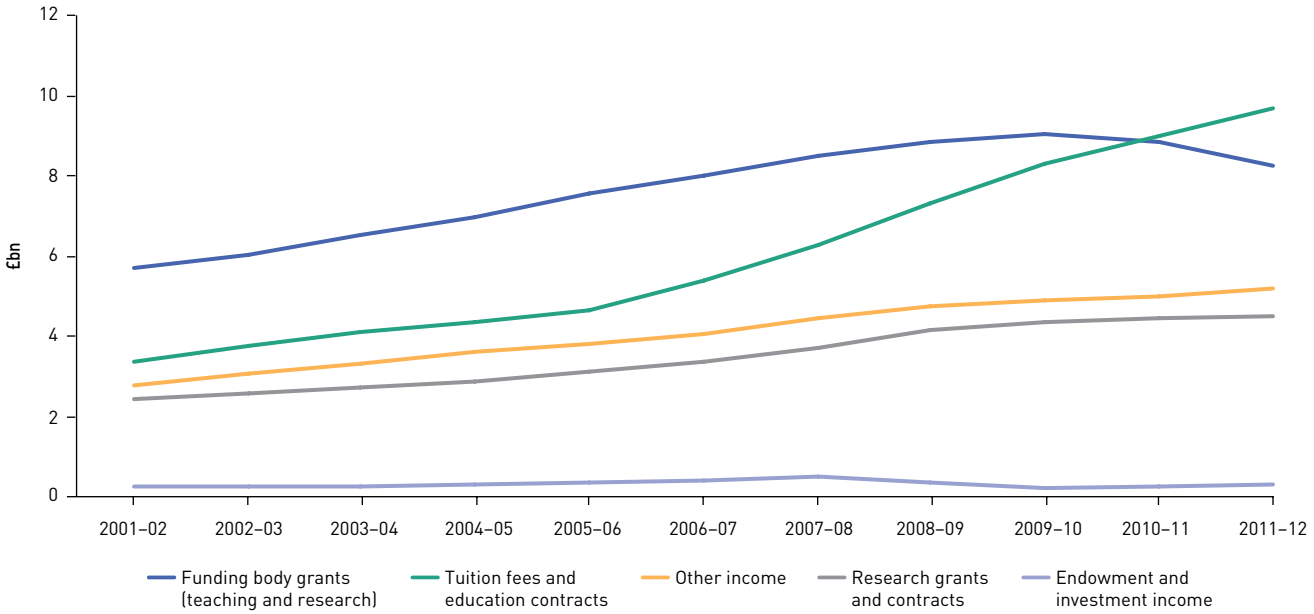
Source: HESA

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 increasing in their importance as part of institutions' strategies to finance new capital investment. They have always been reinvested by universities in order 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 confirms significant changes in the way universities have been funding capital expenditure. Between 2009–10 and 2011–12 overall capital investment slightly declined, yet the amount funded by institutions' own internal cash resources increased threefold. Such investments are essential if universities are to meet the expectations of students, and continue to excel in research.

Figure 22 shows how the sources of income generated by higher education institutions have changed over time. Tuition fee and education contract income increased across the period, due to increases in student numbers and tuition fee levels. In 2011–12, tuition fees from non-EU students had grown to £3.2 billion, 11.6% 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 6% a year from 2001–02 to 2009–10, but then dropped by 2% in 2010–11 and a further 6.7% in 2011–12.

All these changes predate the introduction of increased tuition fees and linked reductions in teaching grant funding for new UK and EU undergraduate students at universities in England in 2012–13, and changes made in parallel to the funding arrangements for universities in Scotland, Wales and Northern Ireland. The balance between direct government funding for teaching and funding via tuition fees will continue to change as the new arrangements are phased in.

Figure 22: Income by source, 2001–02 to 2011–12



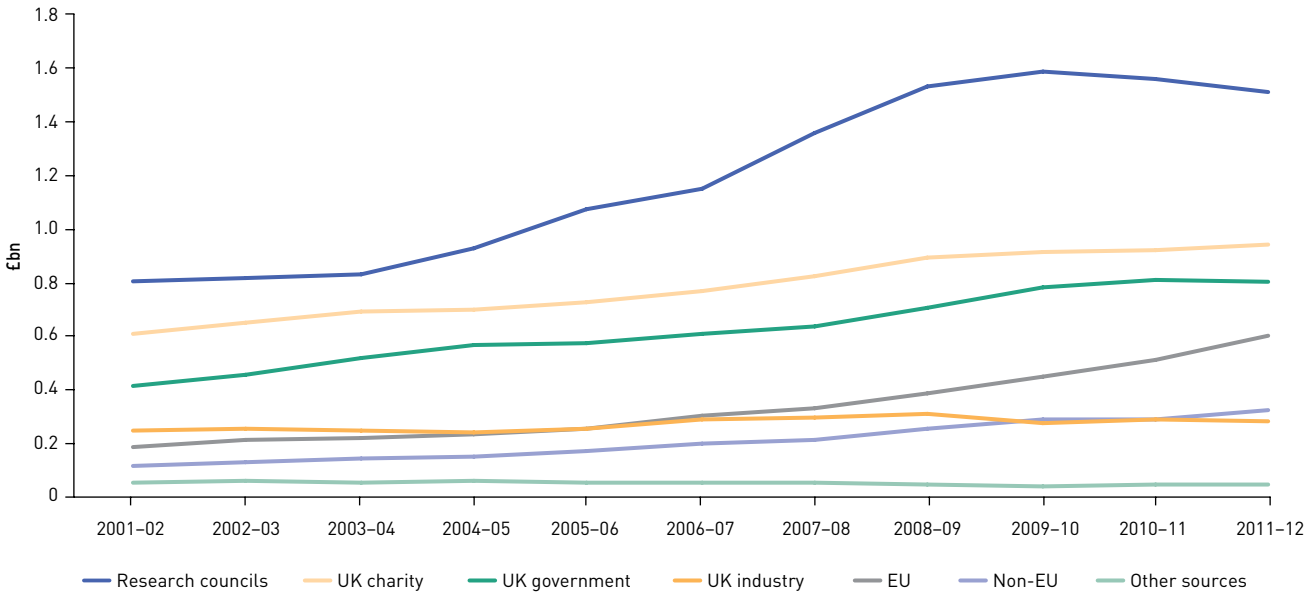
Source: HESA

The funding 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 provision of accommodation).

Research income from grants and contracts is presented in more detail in Figure 23. 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 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. Research income from UK charities grew across the period, reaching a total of £939 million in 2011–12, while research income from UK industry grew by 13.8%, to £285 million.

Figure 23: Research grants and contracts by source, 2001–02 to 2011–12

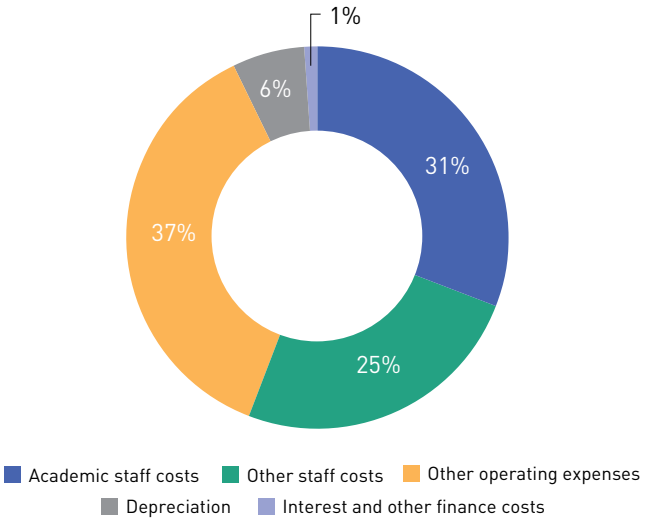


Source: HESA

One of the reasons that the income of UK universities has risen is due to increased knowledge exchange activity. The Higher Education-Business and Community Interaction Survey identified total income from the knowledge exchange activity of UK universities of £3.4 billion in 2011–12, an increase of 4% on the previous year. Within this overall increase, there was an 11% increase in activity benefitting small and medium-sized enterprises, activity involving large businesses increased by around 5%, and public and third-sector organisations increased their engagement with universities by 5%. 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 strongly, by 45% since 2003–04 in real terms.[10]

Staff costs make up a little over half of all expenditure in the higher education sector (Figure 24). There has been significant pay restraint in the sector (delivered through the national bargaining apparatus) since 2009, with a cumulative increase of just 2.4% compared to inflation of 11.8% since August 2008. Universities are implementing a wide range of initiatives to enhance operational efficiency and reduce costs. An analysis of university value-for-money reports by HEFCE shows that English universities delivered £481 million in efficiency and cost savings in 2011–12 alone. This is just over 2% of sector expenditure for the period.

Figure 24: Expenditure of higher education institutions, 2011–12



Source: HESA

10. HEFCE Higher Education-Business and Community Interaction Survey: 2011–12

CONCLUSION

The data presented in this report shows how the higher education sector has changed in size and shape at a national level. The overall trajectory is initially one of growth, however the pattern changes at the end of the period: the number of students slightly declines in 2011–12, the number of staff declines in this and the preceding year, and annual growth in income (in cash terms) gradually slows to a rate of just 1.4% in 2011–12 (Figure 25).

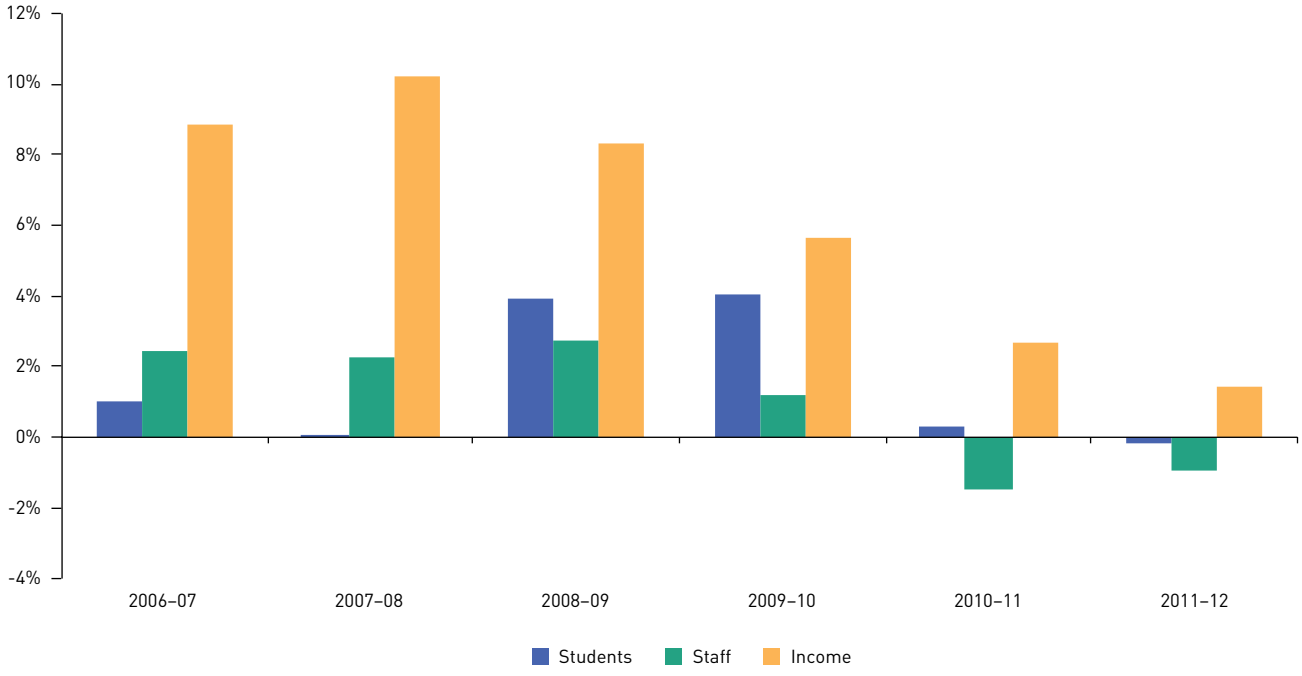
The changes in the size and shape of UK higher education should also be seen in an international context. Data published by the OECD shows growth in tertiary students studying in the UK of 21% between 2001 and 2011. This may be regarded as a healthy growth rate, yet in the same period seventeen other OECD countries grew their tertiary student populations by a larger percentage.[11]

Despite the challenges faced in a dynamic and sometimes uncertain environment, the UK higher education sector can point to a number of high-level indicators of success:

- Universities have achieved consistently high levels of student satisfaction. In 2012 and 2013, 85% of respondents to the National Student Survey were satisfied with their course. Prior to this overall student satisfaction each year had ranged from around 80% up to 83%.
- In research, the UK's share of global citations has been measured at 10.9%, while the UK produces 6.4% of all articles. The UK's share of the world's top 1% of most highly cited papers stood at 13.8% in 2010, second only to the United States.[12]
- As noted earlier, interactions in the field of innovation has grown strongly in recent years, with income from knowledge exchange activity up 45% in real terms over eight years.

All of this has been achieved despite the evidence that many of the UK's competitors are investing a larger share of their GDP in higher education. In 2010, total expenditure on tertiary educational institutions was 1.4% of GDP, below the OECD average of 1.6%.[13] In an internationally competitive environment, the UK higher education sector will have to continue to work hard to maintain its relative position. The figures in this report for the period up to 2011–12 show a higher education sector withstanding external challenges and preparing for uncertainties ahead.

Figure 25: Percentage annual change in students, staff and income, 2006–07 to 2011–12



Source: HESA

11. OECD online statistics, published at www.stats.oecd.org
12. Elsevier, for BIS (2011) *International Comparative Performance of the UK Research Base – 2011*
13. OECD (2013) *Education at a Glance 2013*

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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

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