THE FUNDING ENVIRONMENT FOR UNIVERSITIES

AN ASSESSMENT

Higher education – a core strategic asset to the UK

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HIGHER EDUCATION IN FOCUS: **NEW HORIZONS**

Universities UK

Foreword

Universities are essential to sustaining long-term economic growth, and to influencing political, social and cultural life in the UK. They develop a highly-skilled workforce, training undergraduate and postgraduate students who equip the UK economy with the knowledge it needs to grow, and help it be resilient to future economic shocks. They attract and exchange information with researchers around the world, enabling the UK to compete on the international stage. They bring about technological change and improved health and public policy outcomes through the generation and exploitation of cutting edge research.

A sustainable funding environment is crucial for the UK's universities to maximise their contribution to economic growth. From 2011 to the present day and beyond, the UK's universities are experiencing unprecedented changes in the policy environment, in the funding of higher education, and in the recruitment of international students. These changes are occurring against the backdrop of a volatile external economic environment and significant demographic developments. All of this has implications for the funding and financial sustainability of our universities.

This report examines the patterns in undergraduate, postgraduate and international student recruitment and how these are affecting the UK's universities. A particular focus is given to the outcomes in 2012–13. The report's main focus is on full-time students; part-time students will be covered in a separate report published later in 2013.

The report's highlights include the following:

- Higher education institutions in England undertook a wide range of preparations for the 2012 cycle of UK undergraduate admissions. However, overall recruitment was still 9% lower than anticipated. This shortfall may in part be due to institutions' concerns about penalties for under or over recruitment.

- While a recent fall in UK postgraduate taught students was compensated by continued growth in EU and non-EU students, there are indications that postgraduate taught students from across the UK, EU and non-EU fell in 2011–12. Some institutions are reporting further falls in the number of postgraduate taught students from the UK for 2012–13.

- The number of first year non-EU students studying in the UK decreased marginally in 2011, contrasting with strong growth in recent years. However, significant falls in the number of new entrants are being experienced in 2012–13 from countries including India, Pakistan and Nigeria. There is continued strong demand from China.

The UK's universities have demonstrated their readiness to embrace change by modifying their financial strategies to prepare for uncertain times ahead. However, this report finds that institutions face a number of challenges in the short to medium term in funding capital expenditure. There is also evidence to suggest that the sector is significantly constrained in terms of its ability to expand in a sustainable manner in the medium term.

This has long-term implications for the UK's skilled workforce, productivity, and economic growth. Factors constraining the ability of universities to expand undergraduate and postgraduate provision will inhibit the future economic potential and competitiveness of the UK. These constraints must be overcome if the UK is to retain its hard-won global competitive advantage.

Professor Eric Thomas
President, Universities UK and Vice-Chancellor, University of Bristol

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CHAPTER 1:
INTRODUCTION

1.1. Purpose and scope of the report

2011 and 2012 were defining years for the UK's higher education sector. They were marked by global economic uncertainty, demographic change, and the introduction of significant changes to the funding of undergraduate students, and student immigration. This report examines the impact on the sector of these pervasive changes.

The report predominantly focuses on three areas of higher education provision in the UK:

- UK- and EU-domiciled undergraduate students
- UK- and EU-domiciled postgraduate students
- Non-EU-domiciled undergraduate and postgraduate students

It analyses changes in these three areas of student provision along with changes in capital funding. Implications for the long-term financial sustainability of the higher education sector are also set out.

For each area, the report examines demand from students and provision supplied by institutions in the years leading up to 2012–13. In addition, it explores 2012–13 outcomes as far as the available data allows. It also analyses the potential factors driving changes in supply and demand in the run-up to 2012–13.

The report covers all UK higher education institutions in analysing the markets for UK- and EU-domiciled postgraduate students, and non-EU undergraduate and postgraduate students. However, in analysing the market for UK- and EU-domiciled undergraduate students, the report focuses only on provision by institutions in England. This is due to the divergence of funding policies across the devolved administrations.

The report's main focus is on full-time students. The impact of policy changes on part-time higher education is the subject of a separate Universities UK review, which will report later in 2013. Changes in health and teacher training policy will be covered in a separate report.

1.2. 2012–13 outcomes and availability of data

This report monitors changes in UK- and EU-domiciled undergraduates, UK- and EU-domiciled postgraduates, and international students in the context of a changing policy environment in 2011 and 2012. In particular, the outcomes relating to the 2012–13 academic year are compared with recent years.

The main policy changes in 2011 and 2012 considered in the report include the following:

- Reforms to the funding of undergraduate students in England, including changes to fee-setting by universities, and changes to recruitment by institutions through deregulation and the operation of student number controls
- Reforms to student immigration to the UK, affecting a student's entry requirements, their entitlements during study and the options available to them afterwards

While these policies were implemented in 2011 and 2012, the data available to assess 2012–13 outcomes is still emerging. As we stated in our response to the government's Higher Education White Paper, a thorough assessment of 2012–13 outcomes is unlikely to be possible until March 2014 at the earliest.

This report uses all publicly available data sources up until April 2013, combined with qualitative intelligence gathered from the higher education sector, to monitor 2012–13 outcomes. Given the availability of data, the assessment set out in this report should be considered as interim in nature; UUK will publish further updates in due course.

1.3. Structure of the report and key findings

The report is structured as follows:

Chapter 2 covers the market for UK- and EU-domiciled undergraduate students. It gives an overview of the higher education reforms and 2012–13 outcomes. It examines outcomes relating to particular groups of students and the impact on higher education institutions in England.

Chapter 3 covers the market for UK- and EU-domiciled postgraduate students, with a focus on outcomes leading up to 2012–13. However, it should be noted that the full effect of reforms to undergraduate funding will not be felt on those progressing to postgraduate study until 2015–16 at the earliest.

Chapter 4 covers the market for non-EU-domiciled undergraduate and postgraduate students, and gives an overview of the immigration reforms. It examines outcomes in the lead up to 2012–13, and evidence giving an early indication of 2012–13 outcomes.

Chapter 5 draws together the various impacts on the different markets in chapters 2 to 4, and gives an overview of resulting trends in income and expenditure in the run-up to 2012–13. It then takes a look forward at implications for the long-term financial sustainability of the higher education sector in England, with consequences for the future economic potential of the UK.

Key findings of the report include:

- The number of UK full-time undergraduate mature (aged 21 and over) students accepted into higher education fell by 4% in 2012. This marked the second consecutive year of falls for this group. It is as yet unclear whether this is a temporary fall or marks a more permanent trend.

- The likelihood that a person will enter university is dependent on their socio-economic background, and pronounced differences exist between different socio-economic groups. These differences remained pronounced for 18-year-olds applying from England in 2012.

- Higher education institutions in England engaged in a wide range of activities in preparation for the 2012 cycle of UK undergraduate admissions. There was an increased focus on understanding their relative position in the market, on the student-facing elements of the recruitment process and on their offer-making strategies. However, overall recruitment to higher education institutions in England for 2012–13 was 9% lower than anticipated. This shortfall may in part be due to institutions' concerns about penalties for under or over recruitment.

- Since 2010, the number of UK postgraduate taught students has fallen. While this was compensated for by growth in EU and non-EU postgraduate students in 2010–11, the number of EU and non-EU postgraduates fell in 2011–12. Some institutions are reporting further falls in the number of postgraduate taught students from the UK for 2012–13.

- The number of first year non-EU students decreased marginally in 2011, contrasting with strong growth in recent years. A UUK survey shows institutions are experiencing significant falls in the number of new entrants in 2012–13 from countries including India, Pakistan and Nigeria. There is continued strong demand from China.

- Changes in the number of UK undergraduate and postgraduate students, as well as EU and non-EU students, affect the income of institutions. Institutions are increasingly building buffers into their planned income and expenditure to prepare for increased uncertainty and to pursue longer-term plans for capital investment. Potential downside risks to student recruitment from domestic and international sources will have a significant impact on the ability of institutions to maintain and improve the quality of teaching and research infrastructure.

This report will be followed by further UUK publications in 2013–14 that will examine the following topics in more detail:

- Factors that are constraining the ability of universities to expand undergraduate and postgraduate provision

- How part-time and mature student provision can be developed to meet the UK's future skills needs, as part of UUK's Part-time Review[1]

- Changes in health and teacher training policy, and the implications for institutions

1. For more information see www.universitiesuk.ac.uk/aboutus/whatwedo/policyanalysis/studentsteachingsociety/pages/thomasreview.aspx

CHAPTER 2:

THE MARKET FOR UK- AND EU-DOMICILED UNDERGRADUATE STUDENTS

2.1 Scope of this chapter

This chapter examines recent outcomes for full-time UK- and EU-domiciled undergraduate students, with a focus on outcomes in 2012–13 for particular groups of students, and the impact on higher education institutions in England. The analysis of the impact on students covers those from all UK domiciles, studying at all UK higher education institutions (in section 2.4). However, in analysing the impact on the sector, the chapter only covers higher education institutions in England (in section 2.5). This is due to a divergence of funding and supply-side policies across the devolved administrations. The chapter concludes with an overview of the main factors driving the outcomes of the 2012 admissions cycle (in section 2.6).

2.2 Overview of the higher education reforms

In 2010, the government passed higher education reforms with the aim of delivering a high-quality university sector for the UK that is more responsive to the needs of students. In particular, the reforms would implement a significant switch from public money supporting higher education through teaching grants to loans to fund graduate contributions.

Key elements of the reforms for institutions in England included the following:

- Any university or college being able to charge a fee of up to £6,000, or if they meet conditions on widening participation and fair access, being able to charge up to £9,000
- Universities to individually decide what they will each charge, including whether different levels of charges will apply for different courses
- The phasing out of teaching grants, with the limited remaining income focused on priority areas where tuition fees alone may not meet all costs
- Graduates to not make a contribution towards tuition costs until they are earning at least £21,000 (gross, per year), with this threshold uprated in line with earnings from April 2016
- Repayments to be 9% of income above £21,000, and all outstanding repayments written off after 30 years
- A real rate of interest to be charged on loan repayments for graduates earning above £21,000, at a tapered rate for graduates earning between £21,000 and £41,000, up to a maximum of RPI plus 3%. Graduates earning above £41,000 to be charged the maximum real rate of interest, rate of RPI plus 3%

The reforms would take effect for the intake of new students in the 2012–13 academic year at institutions in England.

Governments in Scotland, Wales and Northern Ireland subsequently announced policies on the level of graduate contribution to be paid for full-time students domiciled in their home country and applying to university in their home country. Table 2.1 shows the differing arrangements for students domiciled in a particular country, and applying to study in a particular country. The main arrangements included:

- English-domiciled students entering university in 2012–13 in any of the four UK countries would pay up to £9,000, while those who entered in 2011–12 had to pay up to £3,375.
- For Welsh-domiciled students entering university in 2012–13, the Welsh Assembly Government would pay the difference between £3,575 and the fee charged by an institution up to a maximum of £9,000. This would apply no matter which country in the UK the student decided to study in.
- Scottish-domiciled students entering university in 2012–13 would continue to pay no tuition fee if they chose to study in Scotland, but would need to pay the fee charged by an institution located outside Scotland.
- Northern Irish-domiciled students entering university in 2012–13 would pay no more than £3,465 if they chose to study in Northern Ireland, but would need to pay the fee charged by an institution located outside Northern Ireland.

In addition to the reforms announced in 2010, in 2011 the government published a White Paper,[2] setting out policy changes affecting the provision of higher education in England. It envisaged a greater role for competition between higher education providers, including encouraging the entry of new providers, and the partial deregulation of student number controls.

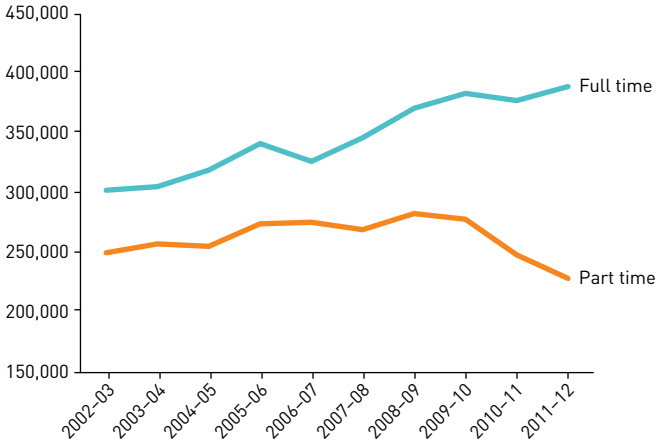
The increase in demand for higher education over the last decade (Figure 2.1) has placed pressures on public funding elements of student support budgets. These included short-term public spending to meet up-front costs of all fees and grants, and longer-term costs where fee and maintenance loans may not be repaid in full.

2. BIS (2011) *Higher education: Students at the heart of the system*

Table 2.1: Fee arrangements across the UK

		Students studying in 2012–13 in			
		England	Wales	Scotland	Northern Ireland
Students domiciled in	England	Variable fee up to £9,000	Variable fee up to £9,000	Variable fee up to £9,000	Variable fee up to £9,000
	Wales	Variable fee up to £9,000 (with fees above £3,575 paid by the Welsh Government)	Variable fee up to £9,000 (with fees above £3,575 paid by the Welsh Government)	Variable fee up to £9,000 (with fees above £3,575 paid by the Welsh Government)	Variable fee up to £9,000 (with fees above £3,575 paid by the Welsh Government)
	Scotland	Variable fee up to £9,000	Variable fee up to £9,000	No fees	Variable fee up to £9,000
	Northern Ireland	Variable fee up to £9,000	Variable fee up to £9,000	Variable fee up to £9,000	Variable fee up to £3,465
	EU	Fees as for English student studying in England	Fees as for Welsh student studying in Wales	Fees as for Scottish student studying in Scotland	Fees as for Northern Irish student studying in Northern Ireland

Figure 2.1: First year UK- and EU-domiciled enrolments to undergraduate courses at English higher education institutions by mode of study



Source: HESA

As a consequence, since 2009–10, controls have been in place on the maximum number of publicly-funded students that each institution can recruit, to avoid unplanned growth and over-recruitment. The cap is broadly applicable to all UK- and EU-domiciled full-time undergraduate entrants and entrants to Professional Graduate Certificate in Education (PGCE) provision who may receive funding from the Higher Education Funding Council for England (HEFCE). Although part-time students also receive public support in 2012–13, through the provision of subsidised loans, they are not included in the control of student numbers.

Table 2.2: Changes to student number controls arising from the White Paper

Students with entry qualifications equivalent to AAB at A-level and above	All institutions are free to recruit as many of these applicants as they like in 2012–13
	Removed from student number controls based on historic numbers in 2010–11 and an assumption of growth by 2012–13
	Estimation that this group would account for just over 85,000 of all entrants in 2012–13
Places allocated through a competitive margin	Re-allocation of 20,000 places to providers with average fees (after waivers) of below £7,500 per year
	Margin created through a pro rata cut, of roughly 9%, to student number control limits at all HEFCE-funded institutions

The White Paper signalled two major changes to be implemented in relation to student number controls. The details for implementation were subject to consultation with the sector. The first change was that student number controls were to be removed for those students with entry grades equivalent to AAB or above at A-level. Additionally a 'margin' of places was to be created and reallocated on the basis of cost and quality. With these proposed changes the government aimed to increase competition between providers, and in turn produce a system that was more responsive to student demand (Table 2.2).

2.3 Availability of data

Table 2.3 illustrates the timing of actions taken by UK and EU undergraduate applicants and English institutions for entry into higher education in 2012–13. The corresponding timescale on the availability of evidence to illustrate these actions and outcomes is also shown. There is a substantial lag between publicly available data and 2012–13 outcomes. While data on those applying, and being accepted, into university in 2012–13 is available in 2012 and 2013, final data on the number of students actually enrolling in university, by institution, will not be available until early 2014. The remainder of chapter 2 uses all publicly available data sources up until April 2013 to ascertain changes in the entry of UK and EU undergraduate students and entry to English institutions in 2012–13, but due to data availability this is, necessarily, an interim assessment.

Table 2.3: Timescales of 2012–13 outcomes and evidence for recruitment of UK- and EU-domiciled undergraduate students in England

Date	Announcements and actions relating to 2012–13 recruitment	Evidence of outcomes for 2012–13 (source)
2011		
June–December	Government publishes Higher Education White Paper	
	Universities make decisions on fees for 2012–13 entry and submit access agreements to OFFA	
	OFFA's decisions on access agreements	Fee levels for institutions and access arrangements (OFFA)
	Students start applying for entry in 2012–13	Early indications of the numbers applying to higher education (UCAS)
	Invitation to bid for margin places in 2012–13	
	Outcomes of HEFCE's consultation on teaching funding and student number controls for 2012–13	
2012		
January	Allocations of funding, student number controls and guidance on 2012–13 recruitment announced by government	Allocations of funding and student number controls for 2012–13 (HEFCE)
January–June	Students continue applying for 2012–13	Firmer indications of the numbers applying to higher education (UCAS)
July–August	A-level results day, confirmation and clearing period	Indications of the numbers being accepted into higher education (UCAS)
August–December	Outcomes finalised for students and institutions on recruitment into 2012–13	Final figures for the numbers being accepted into higher education (UCAS)
		Initial indications of student enrolments (HEFCE)
		Indications of student finance costs (SLC*)
2013		
January–June		Indications of the numbers being accepted into higher education, by institution (UCAS)
2014		
January–June		Final data on student enrolments in 2012–13 by institution (HESA)

* Data not publicly available

UCAS: Universities and Colleges Admissions Service
HESA: Higher Education Statistics Agency
SLC: Student Loans Company
OFFA: Office for Fair Access
HEFCE: Higher Education Funding Council for England

2.4 Outcomes for UK- and EU-domiciled undergraduate students for 2012–13

Section 2.4 gives an overview of outcomes for those applying and those accepted into higher education for 2012–13 across all UK higher education institutions. The aggregate numbers include medical, dental and teacher training numbers, which are subject to government targets.

Figure 2.2 shows that the total number of students[3] applying to higher education in 2012 (applicants) fell by 46,524 from 2011 (a fall of 6.6%). Those accepted for entry into higher education (accepted applicants) fell by 27,120 (5.5%). Not all students applying to higher education are accepted, or choose to enter. Those who choose to accept as a proportion to those who apply is the acceptance rate. Hence the smaller fall in acceptances compared with applicants reflects a rise in the acceptance rate.

Figure 2.2 also shows trends in applicants and acceptances from 2006, as there is evidence to suggest that 2011 was not a typical year in terms of overall trends. More detail on this is provided later, in section 2.6.

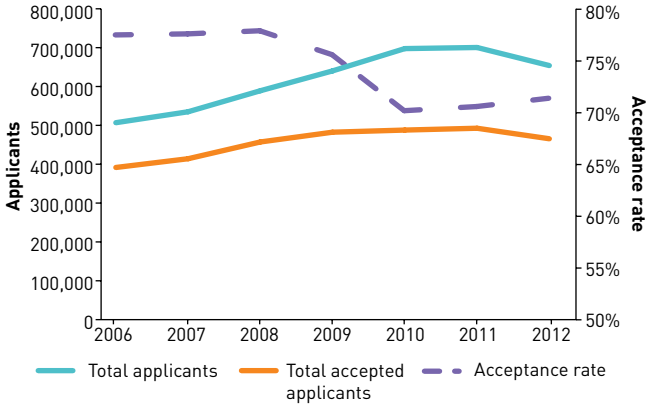
2.4.1 Trends in applicants and acceptances by country of domicile

In 2012, the number of UK-domiciled applicants decreased by 7.6% from 2011, and UK-domiciled acceptances decreased by 5.5%. Figure 2.3 shows that changes in applicants and acceptances between 2011 and 2012 vary considerably in the UK by the country of domicile of the applicant:

- The number applying from England to study at a UK institution fell by 8.6% in 2012, though the number accepted fell by slightly less, 6.6%.
- The number applying from Scotland to study at a UK institution fell by 2% in 2012; however, the number accepted rose by 0.3%. While acceptances of students from Scotland into institutions in England and Wales fell in 2012, this was offset by an increase in acceptances into institutions in Scotland and Northern Ireland.
- The number applying from Wales to study at a UK institution fell by 0.5%, but the number accepted rose by 5.3%. The increase in acceptances of students from Wales was mainly driven by an increase in acceptances to institutions in England.
- The number applying from Northern Ireland to study at a UK institution fell by 4.3%, with the number accepted falling by 3.7%. However, acceptances of students from Northern Ireland into institutions in Northern Ireland increased by 4.4%.

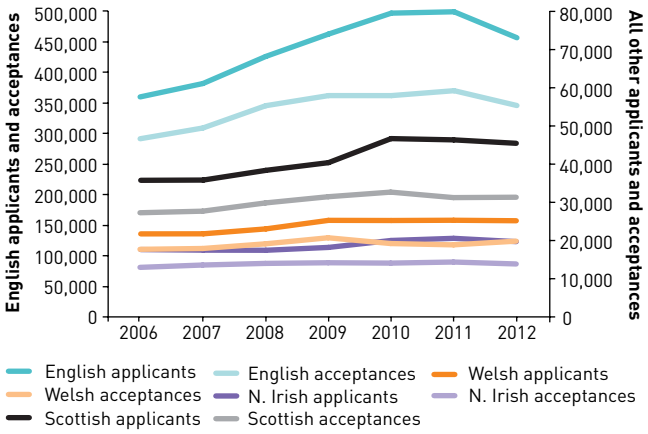
Figure 2.4 shows the cross-border flows of acceptances in more detail.

Figure 2.2: Total applicants and accepted applicants, 2006–12



Source: UCAS

Figure 2.3: Applicants and acceptances by UK country of domicile, 2006–2012



Source: UCAS

3. Including UK-, EU- and non-EU-domiciled students

Figure 2.4: Cross-border acceptances at the end of 2012 cycle

Country of institution

	England	N. Ireland	Scotland	Wales
English student	-6.6% ↓ -23,336 329,945	33.3% ↑ 84 336	23.1% ↑ 758 4,044	-16.7% ↓ -1,920 9,577
Scottish student	-11.0% ↓ -181 1,458	36.8% ↑ 7 26	1.0% ↑ 287 29,362	-20.9% ↓ -14 53
Welsh student	13.2% ↑ 851 7,313	-50.0% ↓ -4 4	23.7% ↑ 22 115	0.9% ↑ 111 11,875
N. Irish student	-16.9% ↓ -652 3,209	4.4% ↑ 381 9,022	-15.5% ↓ -166 907	-33.2% ↓ -72 145
EU student	-17.2% ↓ -3,598 17,348	4.3% ↑ 19 459	3.0% ↑ 130 4,401	-1.8% ↓ -19 1,025
Non-EU student	2.2% ↑ 643 29,523	3.2% ↑ 6 195	-7.4% ↓ -250 3,115	-12.5% ↓ -207 1,453

The figure on the left and the colour of the circle give the percentage change from 2011 to 2012

The **black** figure on the right gives the change from 2011 to 2012

The size of the circle and the grey figure give the number of acceptances

Acceptances

300,000

200,000

100,000

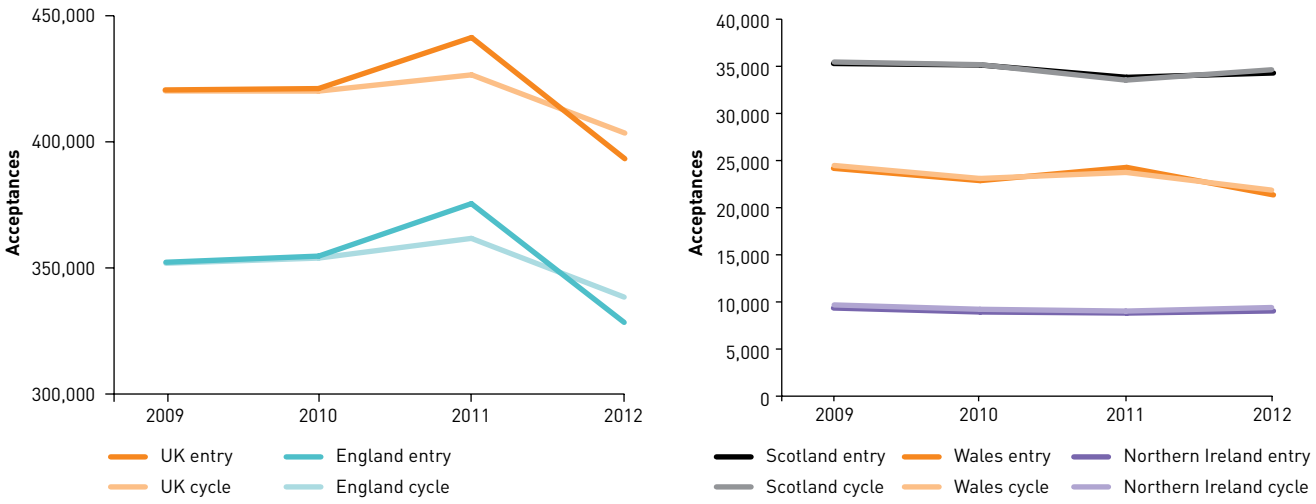
4

Percentage change:

-50% 0% 50%

Source: UCAS

Figure 2.5: Acceptances by entry year (2012–13) and cycle year (2012) and country of institution

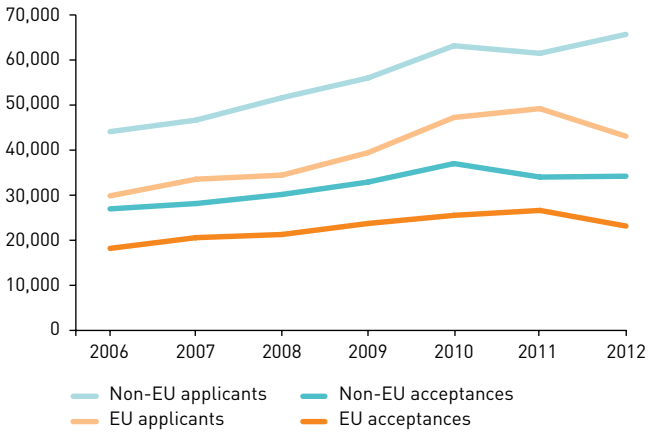


Source: UCAS

Acceptances in 2011 and 2012 differed according to the method of measurement, with results varying by year of entry, compared with the year of the cycle that students applied in. The difference was particularly marked for institutions in England, with less of a difference for institutions in Scotland, Wales and Northern Ireland. The difference between the two methods of measurement is mainly related to deferrals – a proportion of students applying in any given year will defer their entry to the following year. For example, for English institutions in 2010 around 23,600 students chose to delay their entry until 2011–12. However, in 2011 only 9,516 students chose to delay their entry until 2012–13, less than half the level of the previous year. Figure 2.5 shows that changes in deferral behaviour translate to more pronounced rises and falls in acceptances in 2011 and 2012 when viewed by entry year compared with cycle year.

The number of students applying in 2012 from the rest of the EU fell by 12.4%. Those accepted for entry fell by 13%, around 3,500 fewer acceptances. Figure 2.6 shows that this represents a marked change from recent trends in applicants and acceptances from the rest of the EU, which to some extent has not been reflected in applicants and acceptances from outside the EU. The fall in acceptances from the rest of the EU has mainly been driven by a fall in acceptances to institutions in England, with acceptances to institutions in Scotland and Northern Ireland increasing.

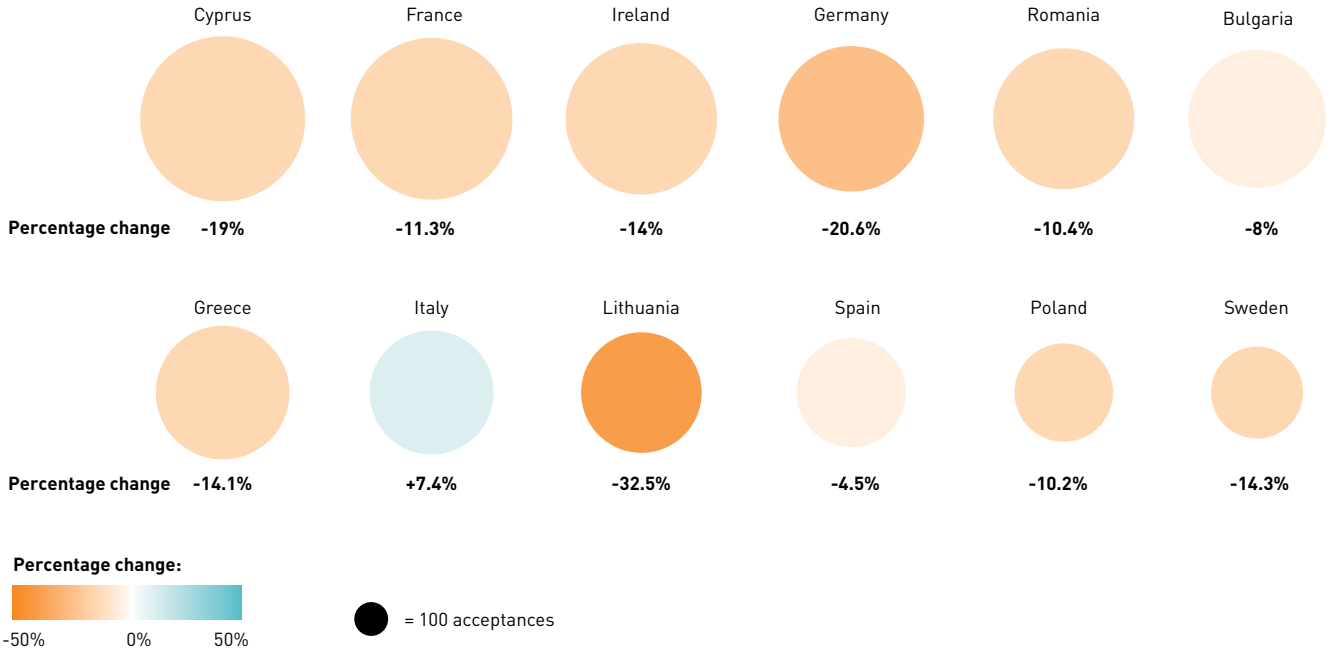
Figure 2.6: Applicants and acceptances for EU- and non-EU domiciled students, 2006–2012



Source: UCAS

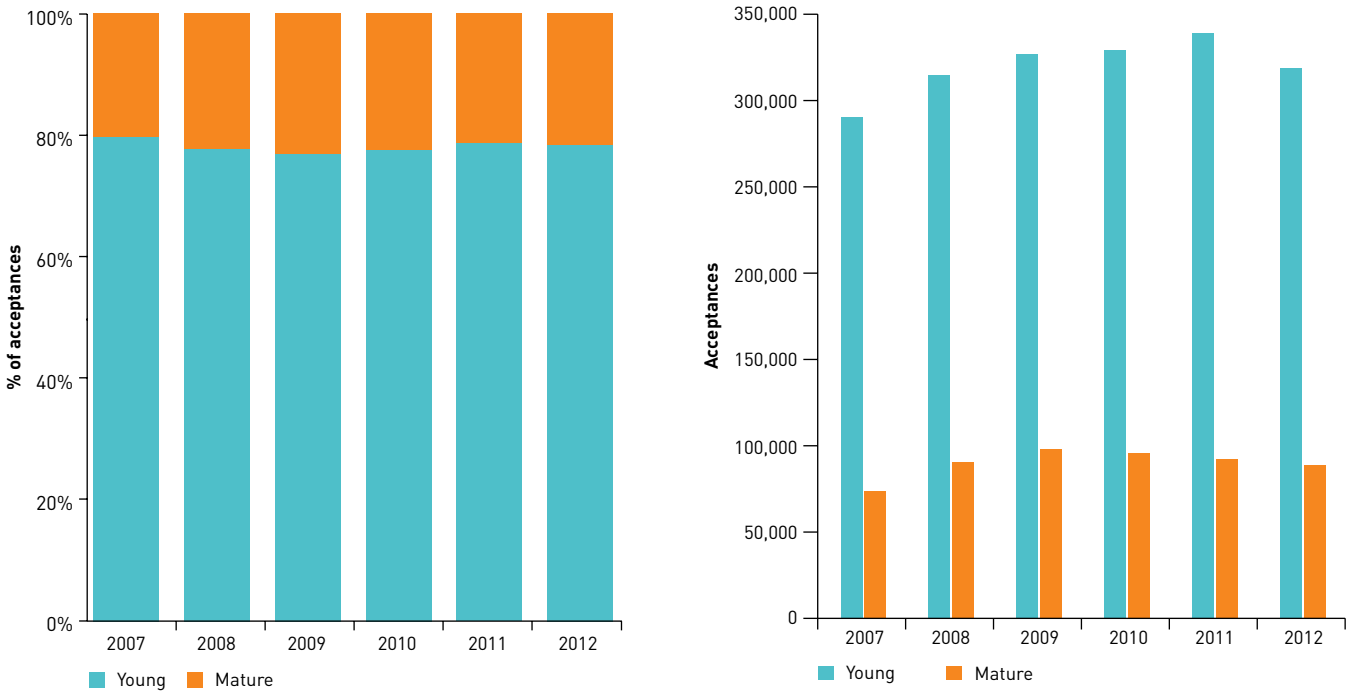
The EU countries accounting for the largest share of acceptances were France, Ireland and Cyprus, as shown in Figure 2.7, and falls from these countries accounted for more than a third of the fall in acceptances from outside the UK. Significant percentage falls were seen in students applying from Lithuania (32.5%) and Germany (20.6%). The fall in students applying from Germany has occurred in spite of a double cohort of pupils being awarded their A-levels in parts of Germany, which is estimated to add more than 100,000 applicants between 2011 and 2013.

Figure 2.7: Total percentage decrease in acceptances for EU countries (for countries with more than 600 students accepted) between 2011 and 2012, by number of acceptances in 2012



Source: UCAS

Figure 2.8: Composition of UK acceptances by age group, in percentage and aggregate terms, 2007–2012



Source: UCAS

2.4.2 Trends in applicants and acceptances by age group

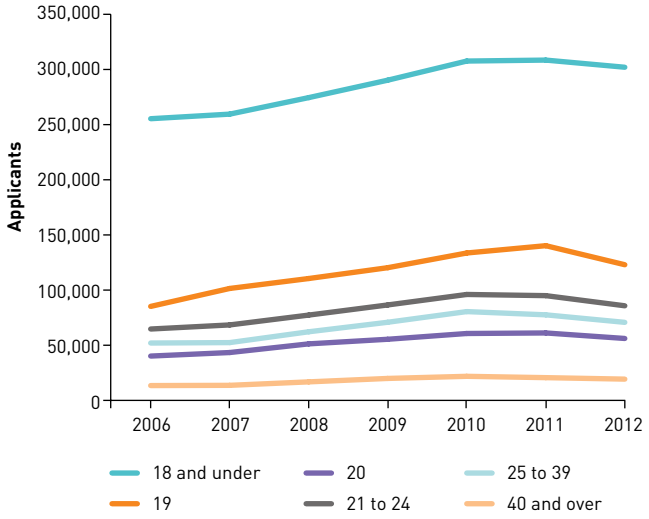
'Mature' students are defined as those aged 21 and over, with 'young' students aged 20 and under. A quarter of full-time undergraduate entrants in the UK are in the mature age group. In 2012, around 22% of UK-domiciled acceptances were from mature students (Figure 2.8).

Figure 2.9 shows that the fall in the number of students from all domiciles applying to higher education in 2012 from 2011 varied considerably by age group of the applicant. While there was only a small fall in the number of 18-year-old applicants, there was a more marked fall in the number of 19-year-old applicants. This may be an indication of students deciding to apply in 2011 when they were 18, and to not delay applying by a year.

Overall, the number of young applicants from all domiciles fell by 5.7%, with mature applicants experiencing a larger fall of 9.2%. For mature applicants, the largest percentage fall was for those aged between 21 and 39 years, a fall of around 10%. The fall for applicants aged 40 and over was 7%.

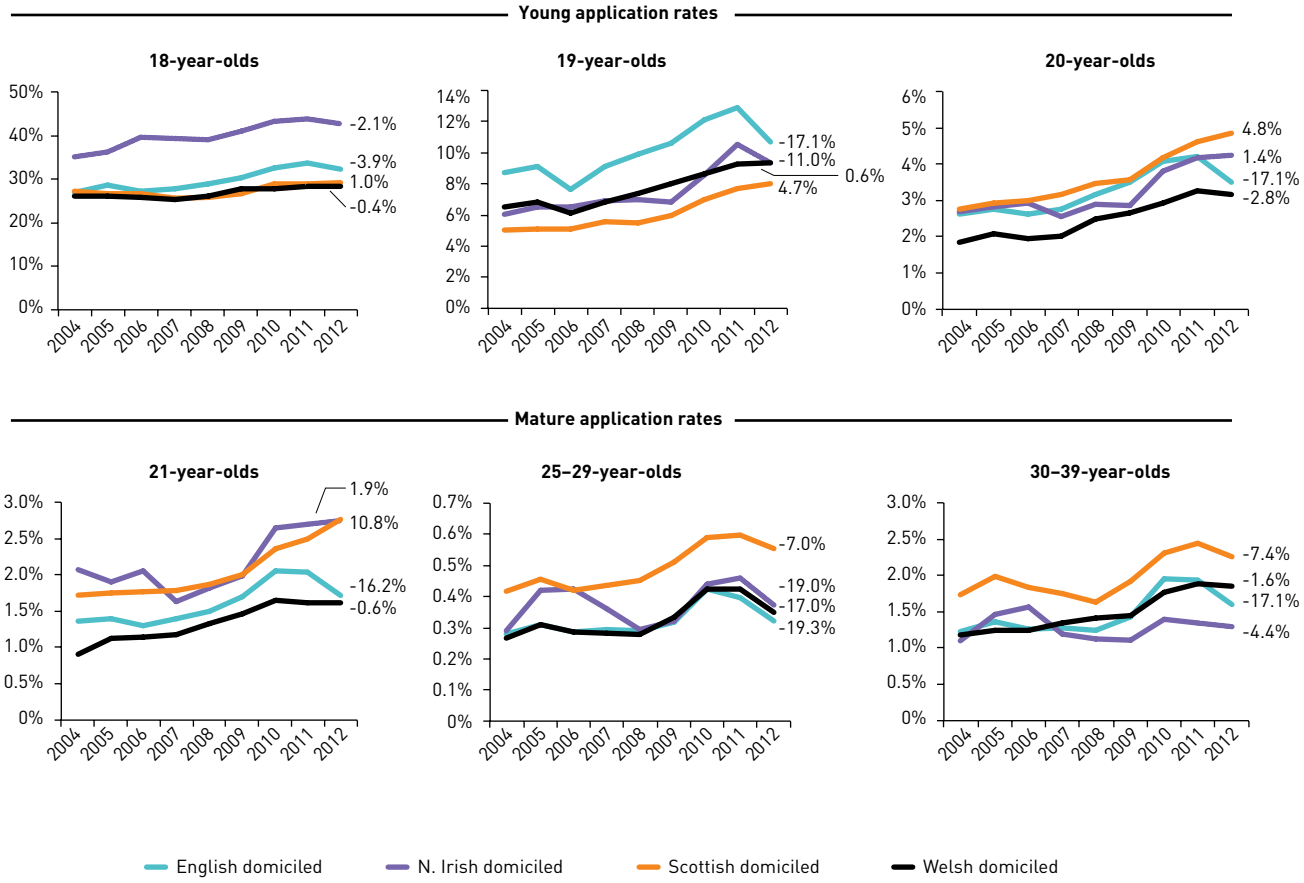
Some of the falls in those applying to higher education in 2012 from 2011 may have been driven by demographic change. Therefore it may be more informative to look at application rates, which measure the proportion of the population applying to higher education, rather than the absolute numbers applying. Figure 2.10 shows that while, to some extent, the fall in 18-year-olds applying to higher education can be explained by demographic change, there are falls over and above changes in demography for other age groups.

Figure 2.9: All applicants by age group, 2006–2012



Source: UCAS

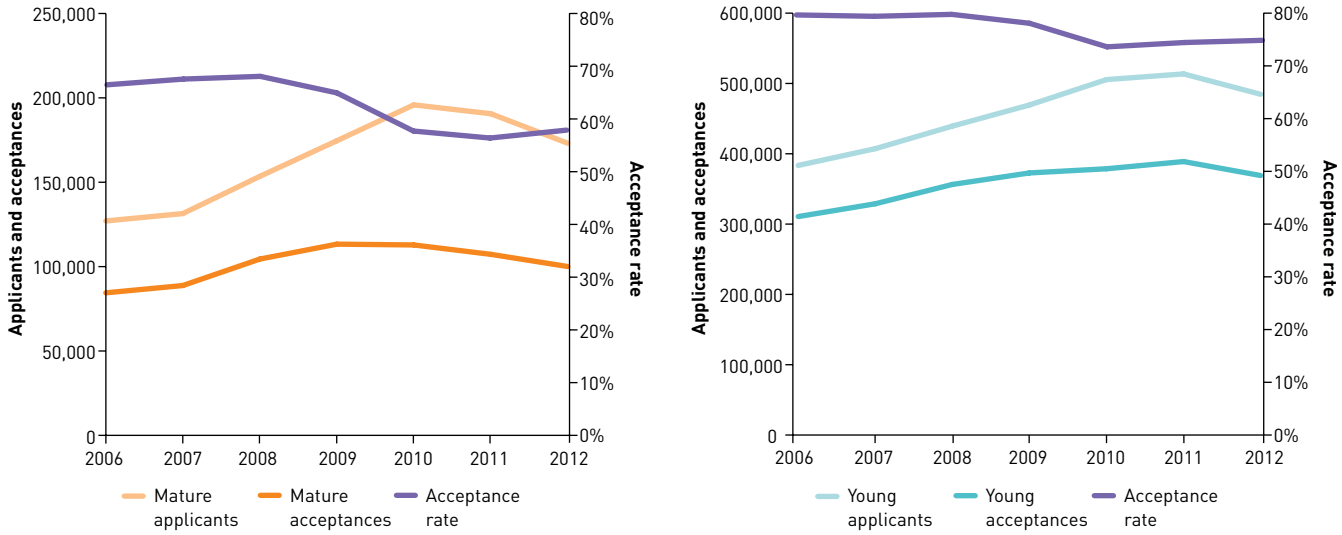
Figure 2.10: Application rates by selected age groups and country of domicile, 2004–2012



Percentage change is shown between 2011 and 2012

Source: UCAS

Figure 2.11: Applicants and acceptances by age, 2006–2012, for all applicants



The fall in the number of mature students applying to higher education in 2012 followed a period of strong growth up to 2010, with a fall in 2011. While there has been strong growth in the number of mature applicants applying to higher education, there has been more muted growth in the number of mature students accepted for entry, as Figure 2.11 shows. This could be due to applicants not being accepted, or those receiving offers choosing not to take them up. The fall in mature students accepting entry in 2012 was 6.8%.

2.4.3 Trends in applicants and acceptances by socio-economic background

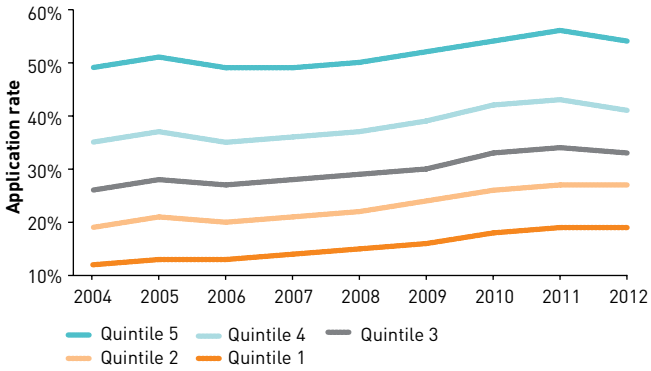
This section examines changes in the number of those applying and being accepted into higher education across varying socio-economic backgrounds. Socio-economic background of applicants can be measured in a number of ways:

- Participation of Local Areas (POLAR) quintiles, which divide UK wards into five different groups, ranging from quintile 1 with the lowest participation of young people in higher education to quintile 5, with the highest
- The Free School Meals (FSM) measure, an indicator for low income background at the age of 15
- Educational background, by type of educational institution attended prior to applying to higher education

Measuring socio-economic background by POLAR quintiles, the proportion of the English 18-year-old population from the most disadvantaged quintile accepting entry into higher education increased in 2012, while the proportion of the English 18-year-old population from the most advantaged quintile decreased. However, the proportion of the 18-year-old population accepting entry into higher education from the most advantaged quintile is still three to four times higher than that of the most disadvantaged quintile. Entry rates for applicants from all backgrounds are relatively close to trends seen between 2006 and 2010.

While the proportion of the English 18-year-old population from the most disadvantaged quintile accepting entry into higher education in 2012 increased, the proportion of this same population applying to higher education barely changed. Therefore, the increase in the proportion of this population entering higher education has mainly been driven by institutional responses, rather than applicant behaviour. However, it is a different story with the English 18-year-old-population from the most advantaged quintile. In 2012, the proportion of this population applying to higher education dropped significantly, as shown in Figure 2.12. HEFCE notes, in its 2013 report on the impact of the reforms,[4] that a greater-than-usual number of more advantaged 18-year-olds could have entered in 2011 than 2012.

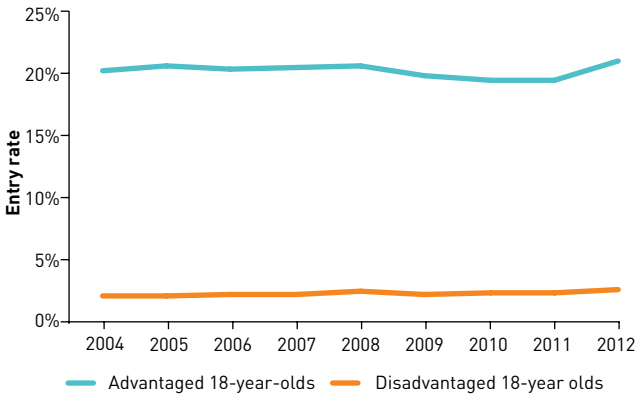
Figure 2.12: Application rates for English 18-year-olds for areas grouped by young higher education participation rate, 2004–2012



Source: UCAS

Entry rates for English applicants from all backgrounds to higher tariff institutions increased in 2012 (Figure 2.13), although a considerable gap remains between those from disadvantaged backgrounds and those from advantaged backgrounds. The proportion of the English 18-year-old population from the most advantaged backgrounds entering high tariff institutions in 2012 was 21%, while it was 2.6% for those from the most disadvantaged backgrounds.

Figure 2.13: Entry rates of English 18-year-olds to higher tariff institutions, by background of young higher education participation rates, 2004–2012

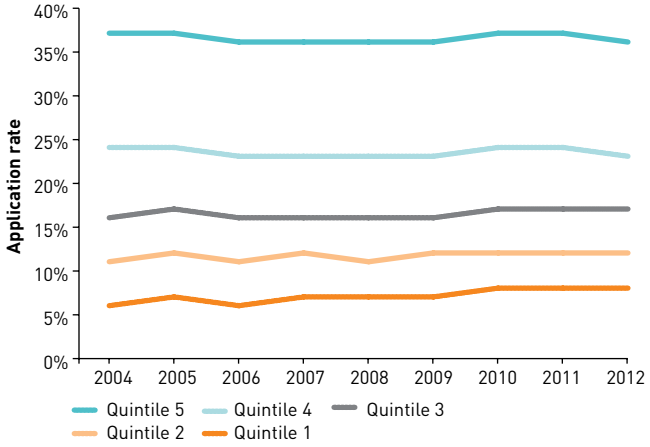


Source: UCAS

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

Applicants from the most disadvantaged quintile of the English 18-year-old population were not deterred from applying to higher tariff institutions in 2012, with the proportion of applicants from this population remaining stable from 2011. Applicants from the most advantaged quintile of the English 18-year-old population were more deterred, with their proportion dipping in 2012 (Figure 2.14) – which could be again due to the impact of deferrals. A significant gap remains between the relative proportions of each.

Figure 2.14: Application rates of English 18-year-olds to higher tariff institutions, by background of young higher education participation rates, 2004–2012



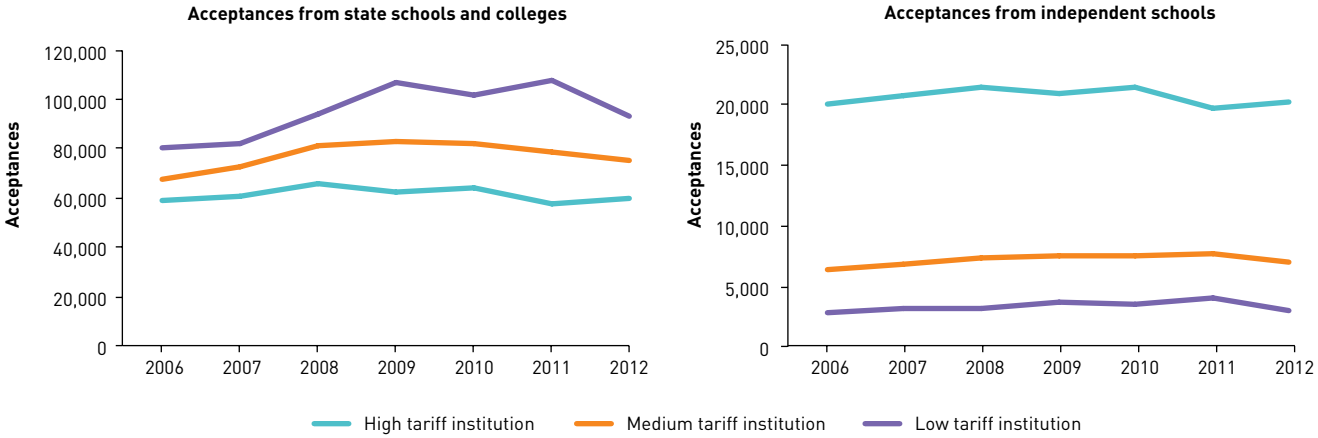
Source: UCAS

The Free School Meals (FSM) measure is used as an indicator of students from a relatively disadvantaged background. The measure has its limitations, however, as it only covers a very small group of students. In addition, some students eligible to be in this group may choose not to take up their entitlement.

The proportion of the population in receipt of FSM applying to higher education is significantly lower than the proportion of the population not in receipt of FSM applying to higher education (around 11%, compared with 30%). In 2012, the proportion of the population in receipt of FSM applying to higher education remained constant from 2011. However, the proportion of those applying who subsequently accepted increased. Numbers remain relatively small, with the increase in acceptances only amounting to around 100.

The educational background of those applying to higher education may also provide an indicator of socio-economic background. Figure 2.15 demonstrates the differences in acceptance levels between state schools and colleges and independent schools, and also how levels differ according to the type of institution, as measured by their level of tariff points. In 2012 acceptances to institutions with high tariffs increased from applicants from both independent schools and state schools and colleges, whereas acceptances to institutions with low tariffs decreased among both groups.

Figure 2.15: Acceptances by type of school and institution type, UK domiciled only, aged 19 and under, 2006–2012



Source: UCAS

2.4.4 Trends in applications and acceptances by choice of subject

The fall in UK-domiciled applications in 2012 has not been uniformly experienced by all subjects. Applications (choices) to humanities-related subjects fell by 11.7%, whereas science-related subjects fell by only 5.1%. Subjects leading to a professional qualification, including medicine, dentistry, veterinary science and law, experienced a fall in UK applications of 5.9%, which is below the average fall of 8.7% (Table 2.4).

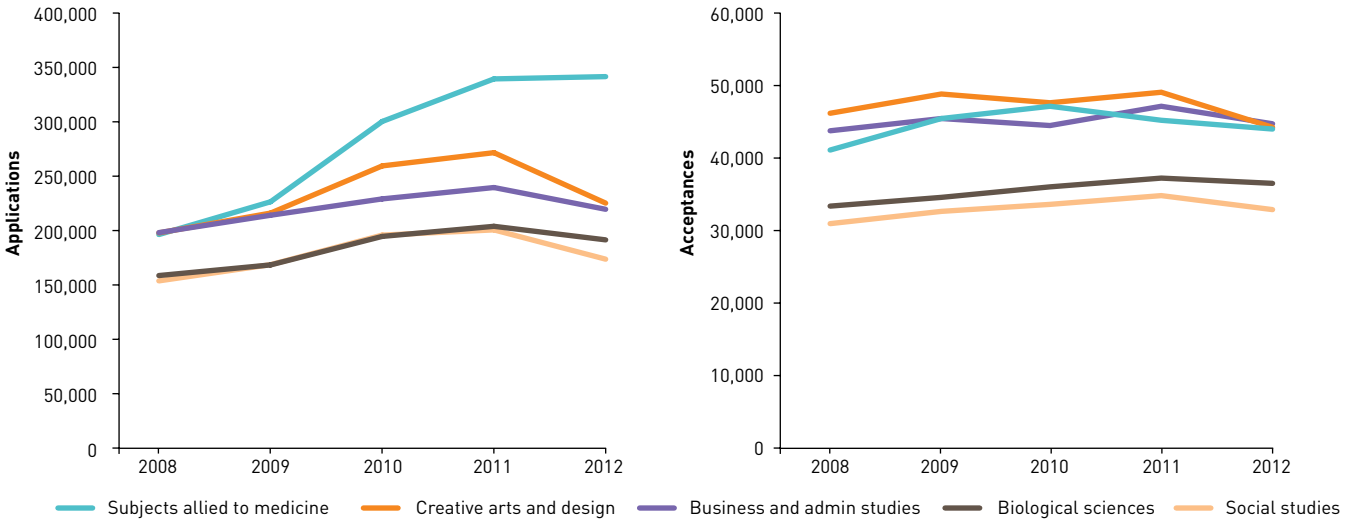
The five subject groups that account for the largest number of applications are subjects allied to medicine, creative arts and design, business and administrative studies, social studies and biological sciences. Together, these five subject groups account for around 50% of all applications. In 2012, applications to all five groups fell collectively by 8.3%. Figure 2.16 shows applications for those groups – the falls for which accounted for half of the total fall in applications in 2012. While creative arts and design and social studies experienced some of the strongest declines, falls in business and administrative studies and biology were relatively less, and subjects allied to medicine increased slightly. Acceptances for all five subject groups fell, with creative arts and design, business and administrative studies, and social studies experiencing the most pronounced falls.

Table 2.4: Applicants for humanities- and science-related subjects, 2008–2012

For UK-domiciled only	2008	2009	2010	2011	2012	% change 2011–12	Difference 2011–12
Choices in humanities	1,049,345	1,130,037	1,252,256	1,280,247	1,129,886	-11.7%	-150,361
Choices in sciences	833,225	909,778	1,061,295	1,128,525	1,070,514	-5.1%	-58,011
All choices	**1,882,570**	**2,039,815**	**2,313,551**	**2,408,772**	**2,200,400**	**-8.7%**	**-208,372**
Acceptances in humanities	226,515	235,568	231,849	238,288	222,707	-6.5%	-15,581
Acceptances in sciences	178,509	189,495	192,785	192,947	184,684	-4.3%	-8,263
All acceptances	**405,024**	**425,063**	**424,634**	**431,235**	**407,391**	**-5.5%**	**-23,844**

Source: UCAS

Figure 2.16: Applications (choices) and acceptances for selected large subject groups (UK domicile), 2008–2012

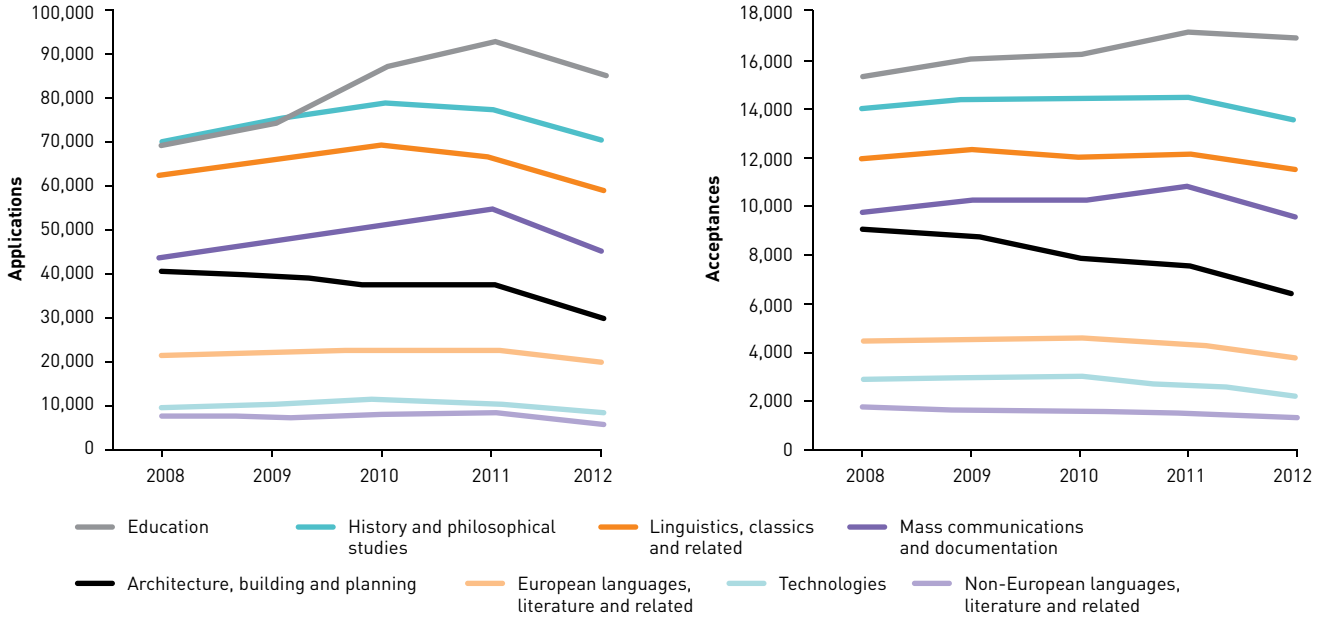


Source: UCAS

Figure 2.17 shows the trend in applications for some of the smaller subject groups. The magnitude of falls in historical and philosophical studies, linguistics and classics, mass communications, education and architecture were pronounced, with falls in languages and technologies less so, though the historically smaller number of applicants in languages and technologies should be kept in mind. Relative falls in applications were largely reflected in the magnitude of falls in acceptances.

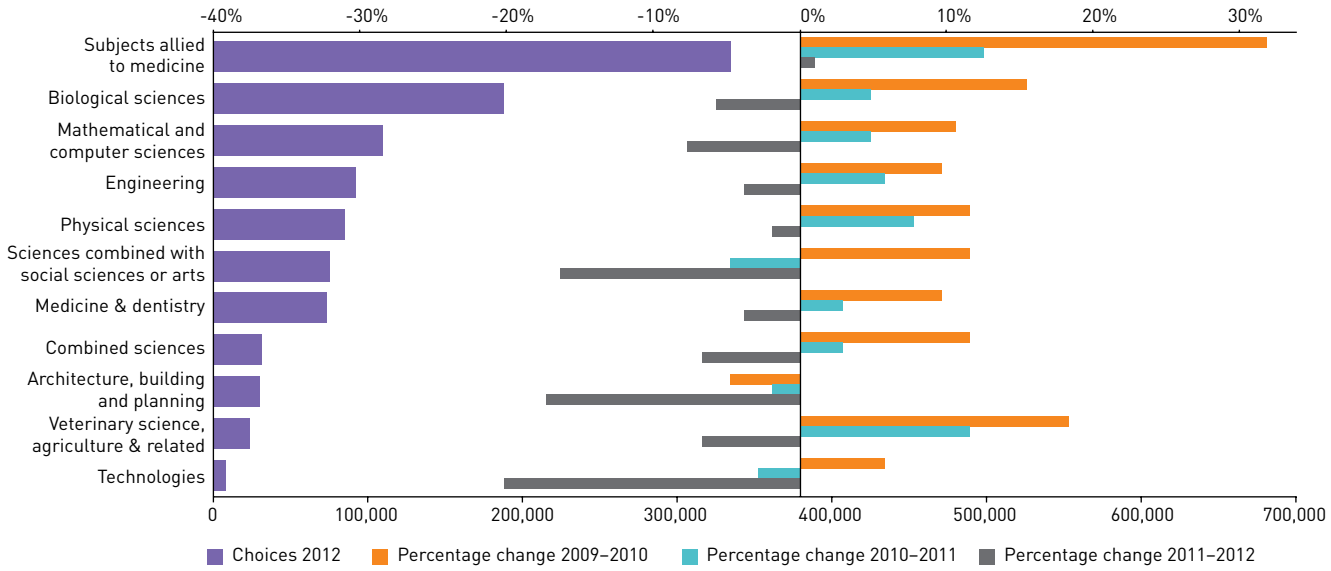
Figures 2.18 to 2.21 show recent percentage changes for applications and acceptances of UK-domiciled applicants for all subject groups. It is important to bear in mind the size of the subject alongside these percentage changes, therefore the bars on the left-hand side show the number of applications and acceptances in 2012. The figures show that some subjects with relatively few applications (such as technologies and non-European languages) experienced the greatest percentage falls in 2012.

Figure 2.17: Applications (choices) and acceptances for selected subject groups (UK domicile), 2008–2012



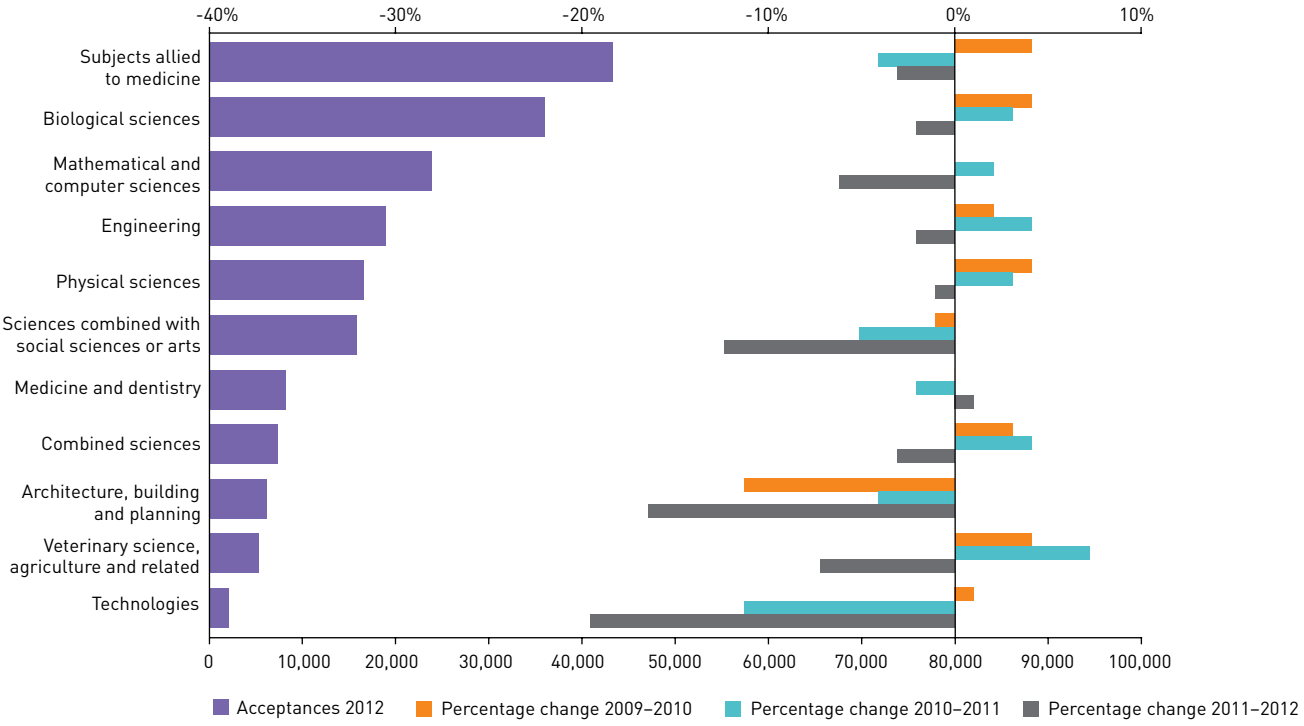
Source: UCAS

Figure 2.18: 2012 UK-domiciled applications (choices) and percentage changes in UK-domiciled applications from 2009 to 2012 for science-related subjects



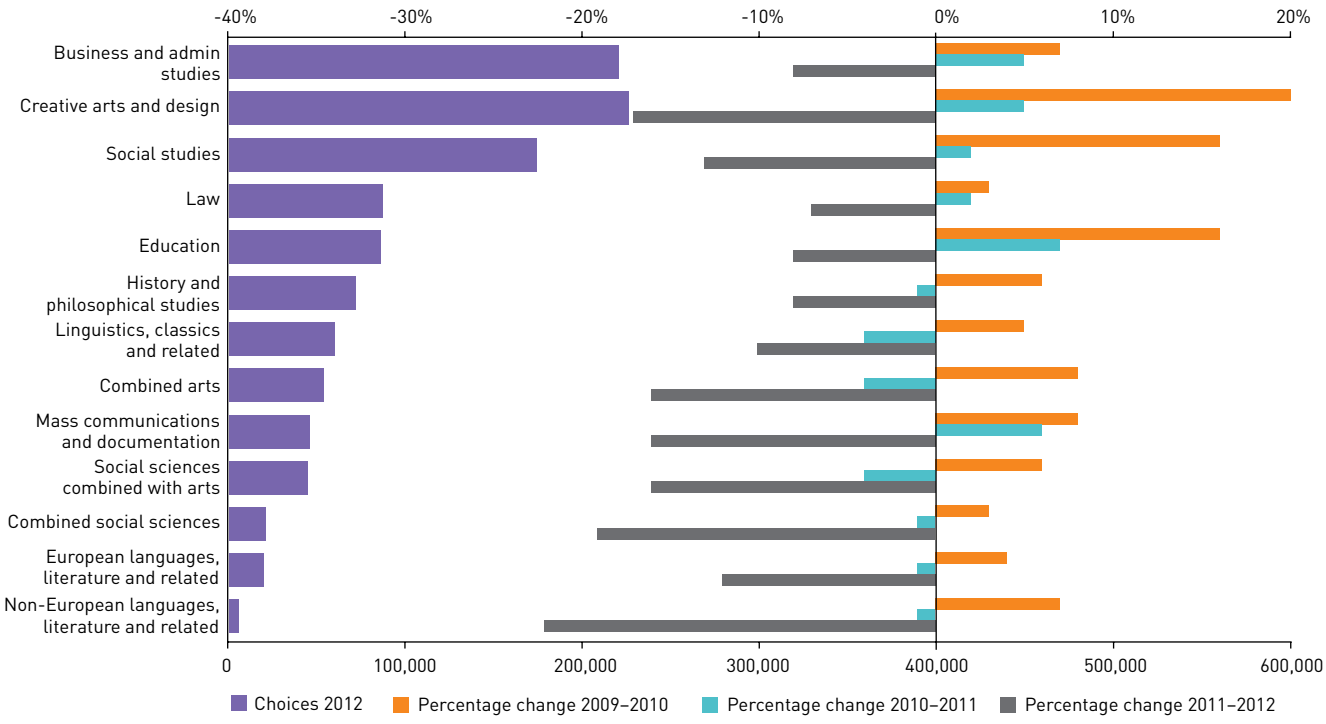
Source: UCAS

Figure 2.19: 2012 UK-domiciled acceptances and percentage changes in UK-domiciled acceptances from 2009 to 2012 for science-related subjects



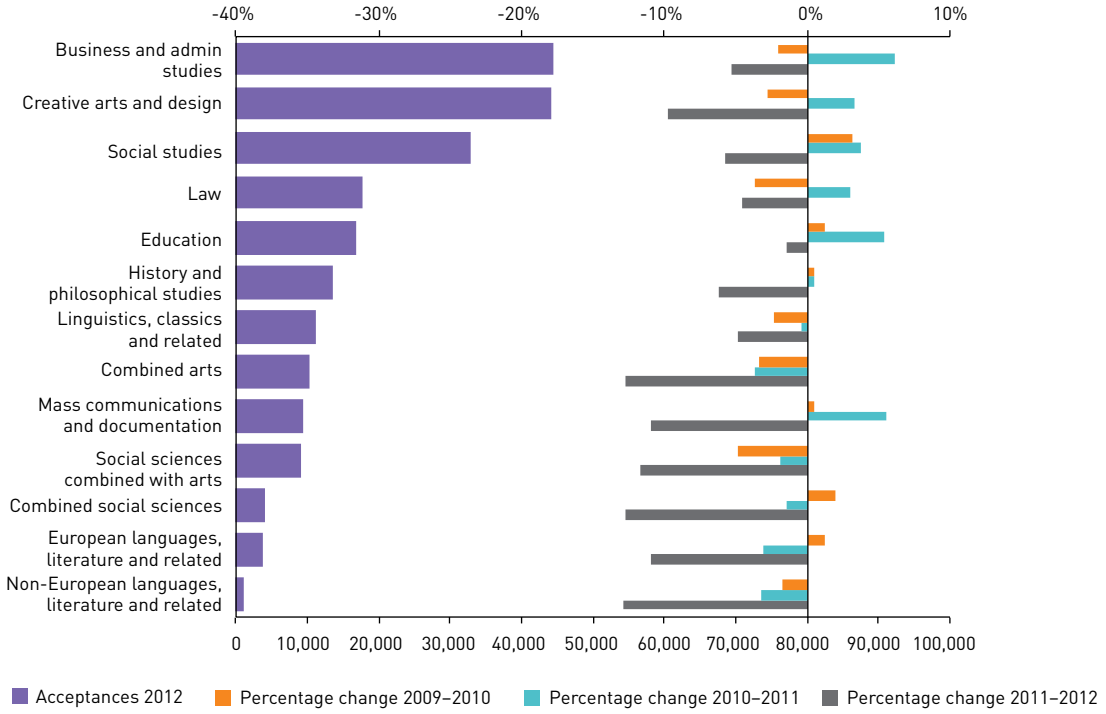
Source: UCAS

Figure 2.20: 2012 UK-domiciled applications (choices) and percentage changes in UK-domiciled applications from 2009 to 2012 for humanities-related subjects



Source: UCAS

Figure 2.21: 2012 UK-domiciled acceptances and percentage changes in UK-domiciled acceptances from 2009 to 2012 for humanities-related subjects



Source: UCAS

2.5 Outcomes for institutions in England for 2012–13

Section 2.4 gave an overview of outcomes for various UK- and EU-domiciled groups applying and those accepted into higher education for 2012–13 for all UK higher education institutions. This section examines the outcomes for publicly funded providers of higher education in England.

In 2012–13 student number control arrangements broadly covered full-time UK and EU undergraduate entrants to higher education at higher education institutions and further education colleges in England. This includes two groups of students, the first of which are students who fall within the population where a maximum control limit ('the student number control') on recruitment for each institution is applied. The second group are students who fall outside these limits ('the deregulated student population').

Section 2.5.1 covers the changes to student number controls that institutions were faced with during the 2012–13 recruitment cycle, including estimates of deregulated populations. Section 2.5.2 and 2.5.3 cover actual outcomes of the 2012 admissions cycle and the impact on institutions.

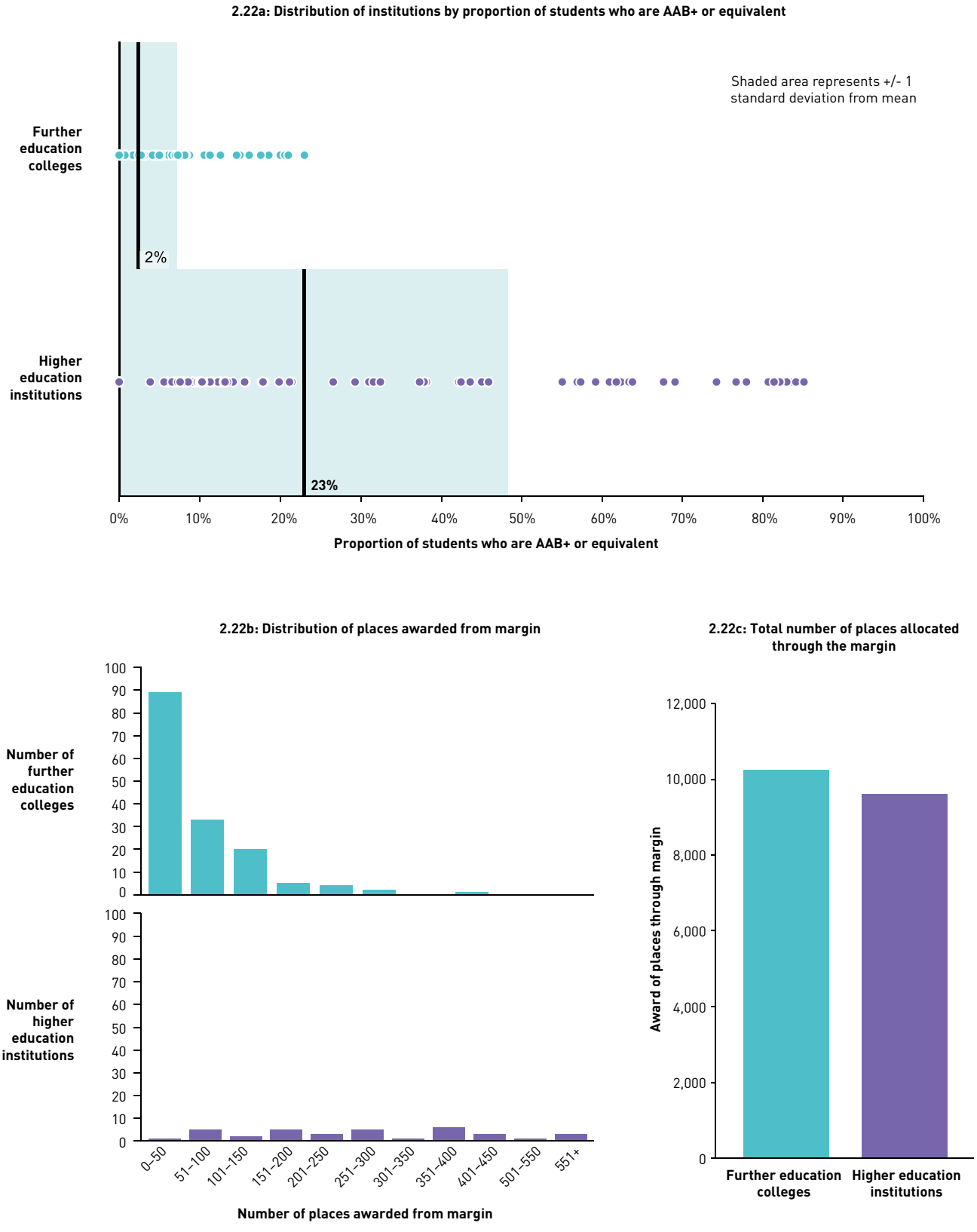
2.5.1 Projected impact of changes in student number controls across institutions

The government's Higher Education White Paper signalled two major changes in relation to student number controls, the first being that controls were to be removed for those students with entry grades equivalent to AAB or above at A-level. Additionally, a 'margin' of places was to be created, reallocated on the basis of 'cost and quality'. With these changes the government aimed to increase competition between providers, and in turn produce a system that was more responsive to student demand. This section illustrates the changes to controls that institutions were faced with during the 2012 admissions cycle.

Figure 2.22a shows the projected impact on institutions funded by the Higher Education Funding Council for England (HEFCE) of the deregulation of controls for students entering with grades equivalent to AAB or above in 2012–13. The figure shows HEFCE's estimates of the AAB population for individual institutions in 2012–13 as announced in March 2012.[5] The anticipated mean level of deregulation at higher education institutions in 2012–13 was around 23% of an institution's total student population, although this varies significantly, as the figure shows, with some institutions anticipated to experience deregulation of over 80% of their places.

5. HEFCE (2012) *Annual funding allocations 2012–13*

Figures 2.22a, 2.22b and 2.22c: Impact of liberalisation of student number controls on providers of higher education in England, 2012–13



Based on projections (not actual outcomes) of the AAB+ population in 2012–13.

Source: HEFCE

The anticipated average level of deregulation at further education colleges was significantly lower at 2%.

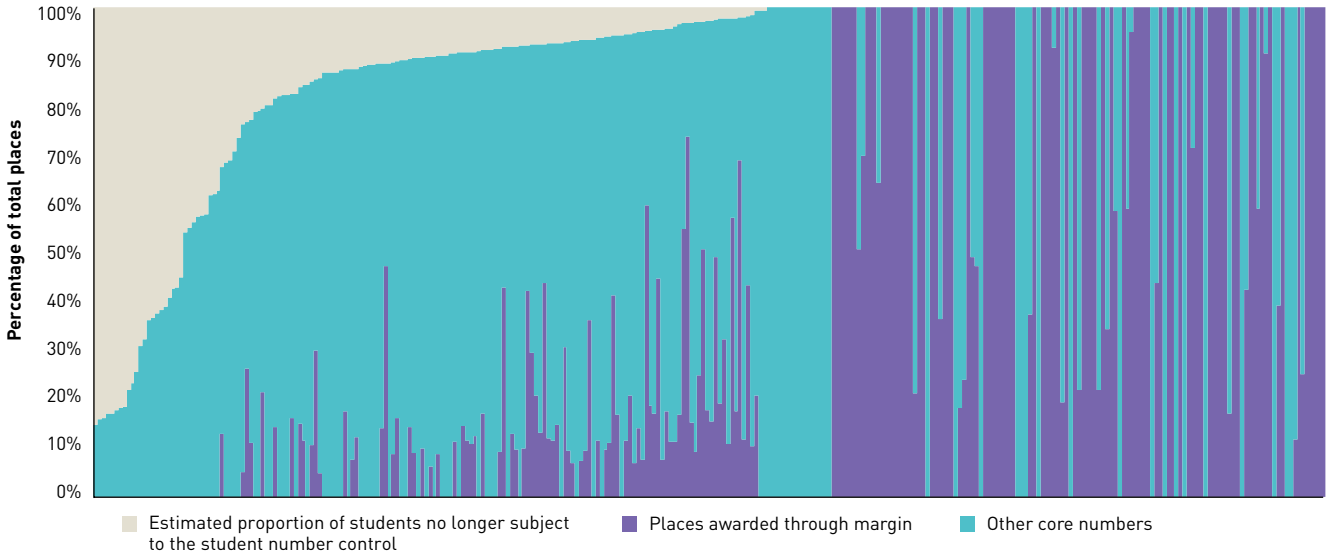
Figure 2.22b shows the impact of the core and margin policy, with the distribution of places awarded through the margin for 2012–13. The reallocation of 20,000 places, taken pro-rata from all HEFCE-funded institutions, resulted in 51.8% being allocated to further education colleges and 48.2% to higher education institutions, a net loss of 9,370 places to higher education institutions in 2012–13. Although further education colleges received a larger number of places overall, these were allocated to 155 providers compared to the 35 higher education institutions that received the remaining 9,640 margin places.

Figure 2.23 shows the combined impact of both the projected deregulation of AAB+ students and the outcomes of the core and margin policy on the composition of implied student numbers for higher education institutions and further education colleges in 2012–13. Implied student numbers provide a notional figure for comparison with the previous year on the basis that each institution is able to maintain its share of AAB+ equivalent and medical or dental students in 2012–13. The expected level of deregulation and allocation of margin places can be seen to vary across the sector, with three main groups emerging:

1. Providers where a significant proportion of places, 40% or more, were deregulated through the AAB+ policy
2. Providers who were awarded places through the margin and also saw deregulation of numbers
3. Sixty-five further education colleges that entered the higher education sector for the first time through the award of margin places

Figure 2.24 shows how the projected impacts of deregulation varied across institutions according to their proportion of students who are AAB+. While implied figures based on projections suggested that some institutions could increase student numbers, the majority would have anticipated contractions. This may have affected institutions' strategies during the 2012 admissions cycle.

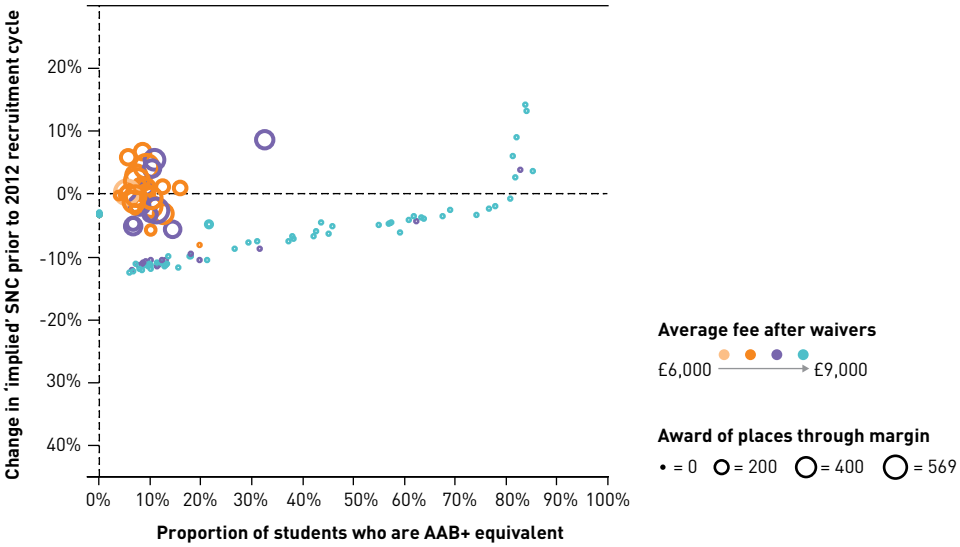
Figure 2.23: Distribution of implied numbers across all publicly funded institutions providing higher education in England for 2012–13



Based on projections (not actual outcomes) of the AAB+ population in 2012–13.

Source: HEFCE

Figure 2.24: Projected impact of supply-side reforms on higher education institutions in England in 2012–13



Based on projections (not actual outcomes) of the AAB+ population in 2012–13.

Source: HEFCE

Universities UK carried out interviews with a sample of vice-chancellors about their preparations for the 2012 cycle. While preparations varied, common themes emerged, including:

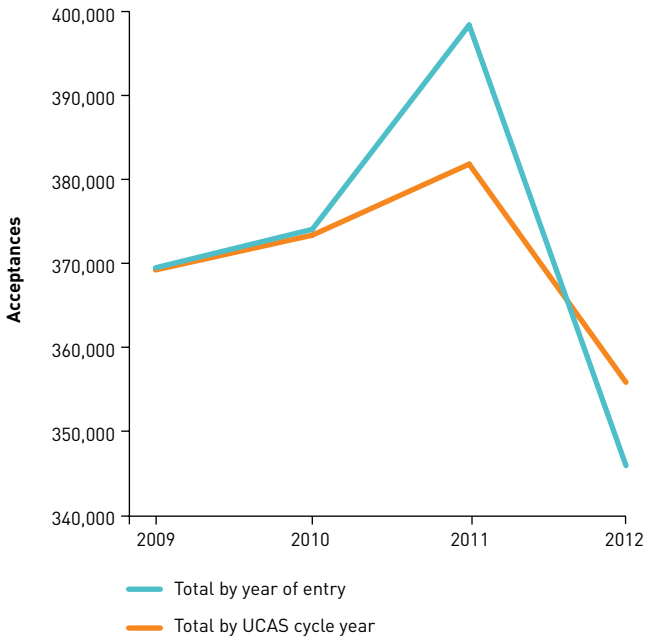
- Institutions developing a heightened sense of the provision they are offering and their share of the market. Some institutions carried out internal reviews of their provision with a view to better understanding their relative position in the market, and to better understand the needs of the student population they attract.
- A greater focus on student-facing elements of the recruitment process, including developing unique selling points and communicating these via marketing efforts, from targeting schools and maximising the impact of open days, to wider advertising campaigns.
- Examining in detail the qualifications of the existing student population and revisiting offer-making strategies for 2012 to adjust to changes in deregulation. Some institutions introduced greater coordination of offer-making strategies across the institution, and looked to improve the speed with which offers were made. Related to this, some institutions reported the importance of tracking student numbers in real time, and the associated need to develop sophisticated monitoring systems.
- Introduction of financial incentives to attract various segments of the market. Other institutions felt that additional inducements were not necessary.
- An acute awareness of the risks of over-recruitment. Strategies were developed to mitigate these risks, including predicting where unexpected increases in numbers might arise and implementing plans to deal with the sources of these increases.

2.5.2 Outcomes of the 2012 admissions cycle on the AAB+ population

2012–13 saw a 48,500 reduction in acceptances for applicants equivalent to those covered by student number control arrangements, including AAB+ and non AAB+ students, for entry in England in 2012.[6] This represents a 14% fall from 2011–12. Figures released by HEFCE in March 2013 show a slightly smaller decline of 12% for the number of entrants who are subject to student number control arrangements (including those in the deregulated population) in 2012–13 from 2011–12.[7] Figure 2.25 demonstrates the impact of deferral behaviour on overall UK and EU acceptances, and clearly shows that changes in deferral behaviour in 2011 have meant that rises and falls in acceptances in 2011 and 2012 by UCAS cycle year are even more pronounced when viewed by entry year. Smaller changes in acceptances for both year of entry and UCAS cycle year are seen when comparing 2012 to 2010.

6. UCAS (2013) *2012 End of cycle assessment of UCAS acceptances by intended entry year, country of institution and qualifications held*
7. HEFCE (2013) *Higher education in England: Impact of the 2012 reforms*

Figure 2.25: UK and EU acceptances to UCAS institutions in England, by entry and UCAS cycle year, 2009–12[8]



Source: UCAS

The reduction of 48,500 consists of a fall of 13,400 in AAB+ students (-14%) and a fall of 35,100 in non AAB+ students (-13%). Although the number of acceptances by all AAB+ students fell by 14% in 2012–13, actual levels remain broadly around 2010–11 levels, as 2011–12 saw a record number of acceptances in the AAB+ group. The two-year average remains broadly in line with historic trends, and close to the 85,000 projected by HEFCE for 2012–13. HEFCE has noted that the overall number of AAB+ entrants in 2012–13 was 5,000 below its initial estimate of 85,000, with a decrease of 4,000 appearing to be the result of fewer deferrals from the previous application cycle.[9]

Looking just at acceptances by AAB+ students, the percentage fall was greater for those who achieved AAB+ through A-levels (17%) than for those who achieved AAB+ through other qualifications (10%).The proportion of AAB+ students with A-levels decreased from around 66% for those entering in 2011–12 to 64% in 2012–13. Table 2.5 provides further details of acceptances related to entry in 2012.

Table 2.5: UK and EU acceptances, related to HEFCE student number control population, to UCAS member institutions in England by student number control group and year of entry, 2009–10 to 2012–13[10]

SNC group		2009–10	2010–11	2011–12	2012–13
AAB+	Acceptances	70,222	80,946	92,909	79,480
	Difference		10,724	11,963	-13,429
	% difference		15%	15%	-14%
AAB+ GCE A-level	Acceptances	48,730	55,138	61,460	51,204
	Difference		6,408	6,322	-10,256
	% difference		13%	11%	-17%
AAB+ other qualifications	Acceptances	21,492	25,808	31,449	28,276
	Difference		4,316	5,641	-3,173
	% difference		20%	22%	-10%
Not AAB	Acceptances	258,446	252,746	262,609	227,494
	Difference		-5,700	9,863	-35,115
	% difference		-2%	4%	-13%
Total	**Acceptances**	**328,668**	**333,692**	**355,518**	**306,974**
	Difference		**5,024**	**21,826**	**-48,544**
	% difference		**2%**	**7%**	**-14%**

Source: UCAS

8. UCAS (2013) *2012 End of cycle assessment of UCAS acceptances by intended entry year, country of institution and qualifications held*
9. HEFCE (2013) *Higher education in England: Impact of the 2012 reforms*
10. UCAS (2013) *2012 End of cycle assessment of UCAS acceptances by intended entry year, country of institution and qualifications held*

The 2011–12 16 to 18-year-old A-level cohort represents those applying for higher education in the 2012 cycle, and therefore gives a good indication of any changes in supply of AAB+ students for 2012–13. As noted earlier, A-level AAB+ acceptances accounted for around 64% of all AAB+ acceptances entering higher education in 2012–13.

Table 2.6 shows the change in achievement for 16 to 18-year-old A-level AAB+ students in England between 2010–11 and 2011–12. The number of students achieving AAB+ in 2011–12 remained more or less flat (0.8% increase) between the two years, suggesting that the supply of recently qualified AAB+ students did not change significantly. As described earlier, however, the change in deferral behaviour for all applicants in 2011 did impact on acceptances for entry in 2012–13.

Table 2.6: A-level achievement at AAB or above: students in England aged 16 to 18, 2010–11 and 2011–12

Year	Total entered for A-levels	% achieving AAB or above	Number achieving AAB or above
2010–11	258,890	20.4%	52,815
2011–12	266,220	20.0%	53,245

Source: HEFCE and Department for Education

In addition to absolute numbers of AAB+ acceptances, two additional measures – the acceptance rate and entry rate of AAB+ students – also demonstrate the changes seen for this cohort in 2012.

Figure 2.26a compares the acceptance rate, the proportion of those applying who subsequently accept a place for entry, of three groups of English 18-year-olds: those accepted with A-level AAB+, those accepted with BTEC AAB+ qualifications and those without AAB+ qualifications. The acceptance rate for A-level AAB+ applicants is significantly higher than that for those applicants holding BTEC AAB+ qualifications or no AAB+ qualifications at all. Both AAB+ groups show a marginal decrease for 2012, after increases in 2011, with the acceptance rate for those without AAB+ qualifications increasing slightly over the same period.

The entry rate, or proportion of the population who enter higher education, of English 18-year-olds by qualification group is shown in Figure 2.26b. 2012 saw a slight decrease in the proportion of English 18-year-olds entering with AAB+ and non-AAB+ qualifications but entry rates remain broadly in line with previous years.

Figure 2.26a: Acceptance rate for English 18-year-olds by type of qualification held, 2008–12[11]

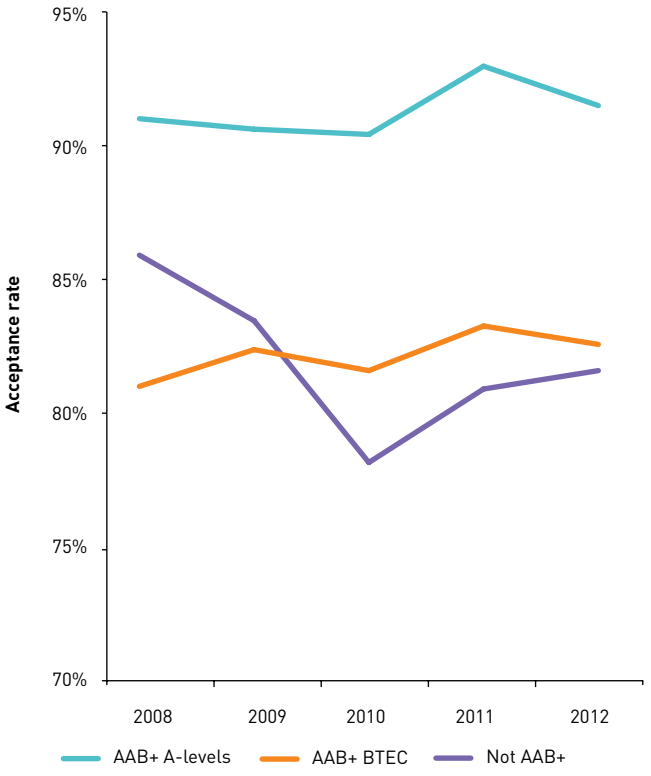


Figure 2.26b: Entry rates for English 18-year-olds by entry qualification group, 2008–12

Source: UCAS

11. UCAS (2012) *End of cycle report*

The 2012 recruitment cycle saw a slight increase in the proportion of applicants predicted AAB+, but this represented no significant change in the prediction behaviour from past trends.

2.5.3 Outcomes of the 2012 admissions cycle for institutions

It is important to note that the final impact of the 2012–13 admissions cycle on enrolments to institutions will not be known until early 2014 when data from the Higher Education Statistics Agency for academic year 2012–13 is released. This section uses publicly available interim data on entrants to higher education in 2012–13 collected by HEFCE to assess potential outcomes.

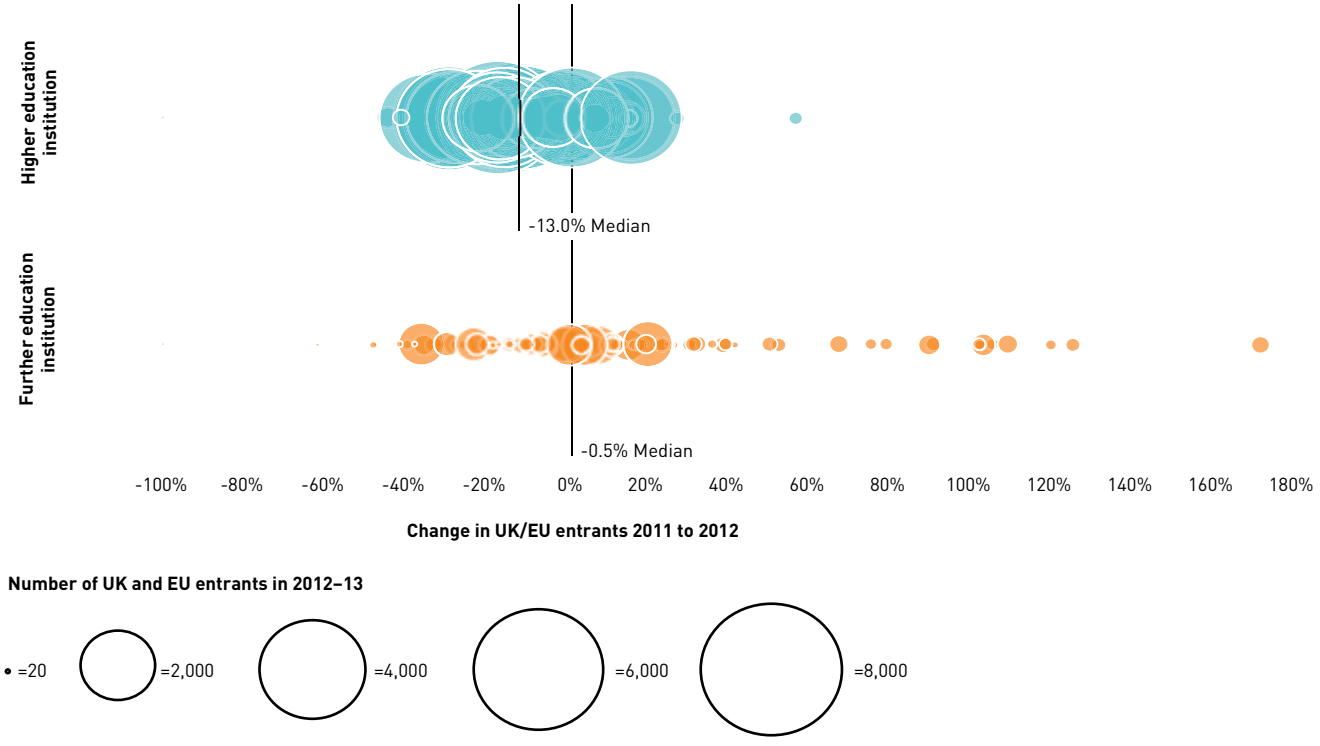
A number of factors have led to greater volatility in demand for 2012–13, including changes to student application behaviour and the impact of demographic changes on the size of applicant cohorts. Changes to student behaviour also seem to differ according to the population in question, with deferral behaviour having a large impact on the number of young students available for entry in 2012–13 and other factors resulting in significant reductions in demand from mature students compared to recent trends.

Figure 2.27 summarises the change in entrants between 2011 and 2012 cycle years. The median change in entrants was -13% for higher education institutions and -0.5% for further education colleges. Although further education colleges, on average, saw a smaller decrease in entrants, the level of variation differed significantly between the two groups, with 30 further education colleges reporting a decrease in entrants greater than 13%.

Figure 2.28 shows the change in entrants subject to student number control arrangements (including those in the deregulated population) for higher education institutions in 2012 cycle year by the level of deregulation of student numbers. Figure 2.24, showing the change in implied student number controls for institutions based on projections of the AAB+ population in 2012–13, is reproduced as part of Figure 2.28 for ease of comparison. Figure 2.28, in essence, shows implied changes if institutions maintained recruitment at previous levels, alongside the actual outcomes relating to changes in entrants.

Figure 2.28 shows a wide variation in outcomes at an institutional level, with the majority of institutions showing decreases in entrants that are subject to student number control arrangements in 2012–13. A number of institutions showed an increase in entrants over the same period; these were not

Figure 2.27: Summary of change in full-time undergraduate entrants between 2011 and 2012 for providers of higher education in England, by provider type



Note: Excludes outliers that are +/- 2 standard deviations from population mean for each provider type

Source: HEFCE

confined to any particular type of institution. On average, institutions in the lowest quartile of deregulation showed the greatest proportional decrease in entrants and those in the highest quartile the lowest proportional decrease. This, however, varied significantly, with institutions in all quartiles of deregulation experiencing both increases and decreases. HEFCE notes in its 2013 report on the impact of the reforms that overall recruitment in 2012–13 fell below planned numbers by around 28,000 places, or 9%.

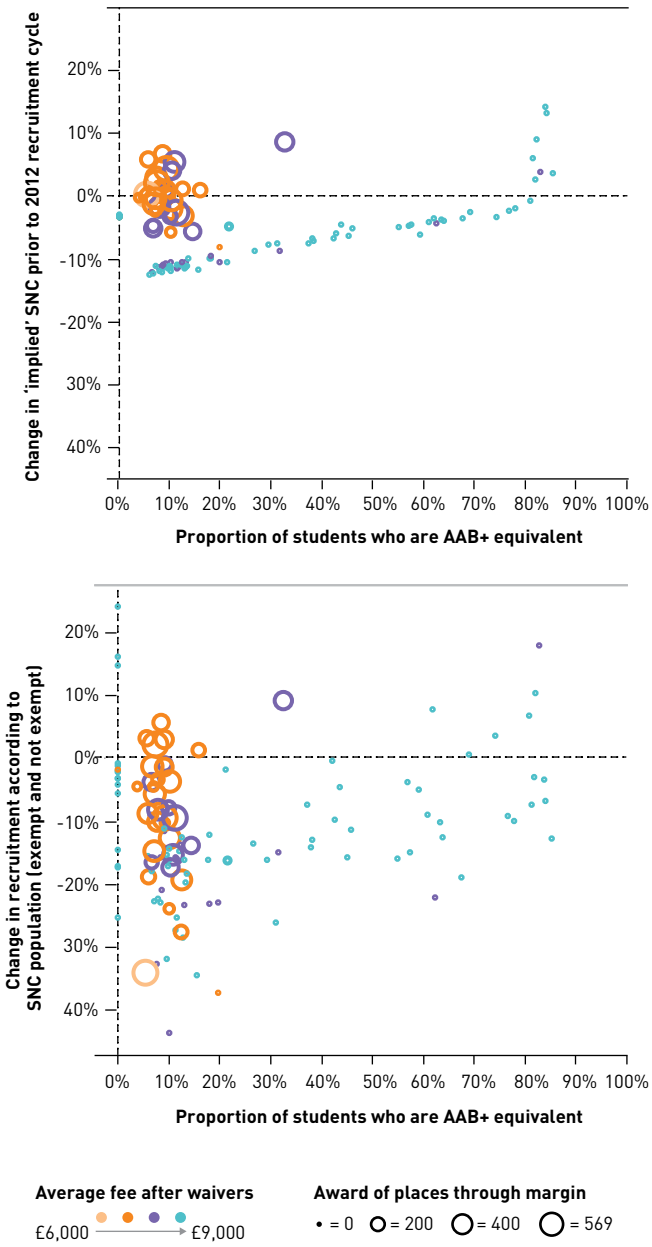
Some of the greater-than-expected reduction in entrants may reflect restrictions on over- and under-recruitment in 2012–13 and the impact that these may have had on institutional behaviour. Early announcements suggested that for 2012–13 any institution recruiting below 95% of its student number control limit was likely to face a downward adjustment to its control limit in 2013–14. This was subsequently reassessed by HEFCE and not implemented for 2012–13 due to the factors mentioned in this section and the variations in recruitment highlighted in Figure 2.28.

The secretary of state's grant letter to HEFCE in January 2012 did not give a figure for penalties related to over-recruitment in 2012–13. It did, however, outline that grant adjustments would increase significantly compared to those in previous years. This, along with a reduced student number control limit (to account for the removal of 5,000 places to align control limits with government plans and the transfer of 10,000 places to further education colleges as part of the margin exercise), may have influenced institutional recruitment strategies.

HEFCE has noted that around 26% of higher education institutions filled all of their margin places, with 20% filling none. 26% of further education colleges filled all of their margin places, with 17% filling none.[12]

While Figure 2.28 shows the change in entrants by the level of deregulation of student numbers, it is also informative to consider how changes in entrants have been distributed across institutions according to other characteristics. Figure 2.29 demonstrates the change in entrants at higher education institutions by selected measures including employment outcomes for graduates, student satisfaction and fee level. There are some indications that those institutions with high employment rates tended to have larger increases in entrants compared to those with very low rates. However, there does not seem to be any pattern emerging in response to variation in fees across the sector.

Figure 2.28: Change in implied student number controls and change in entrants at higher education institutions in England for 2012 recruitment cycle

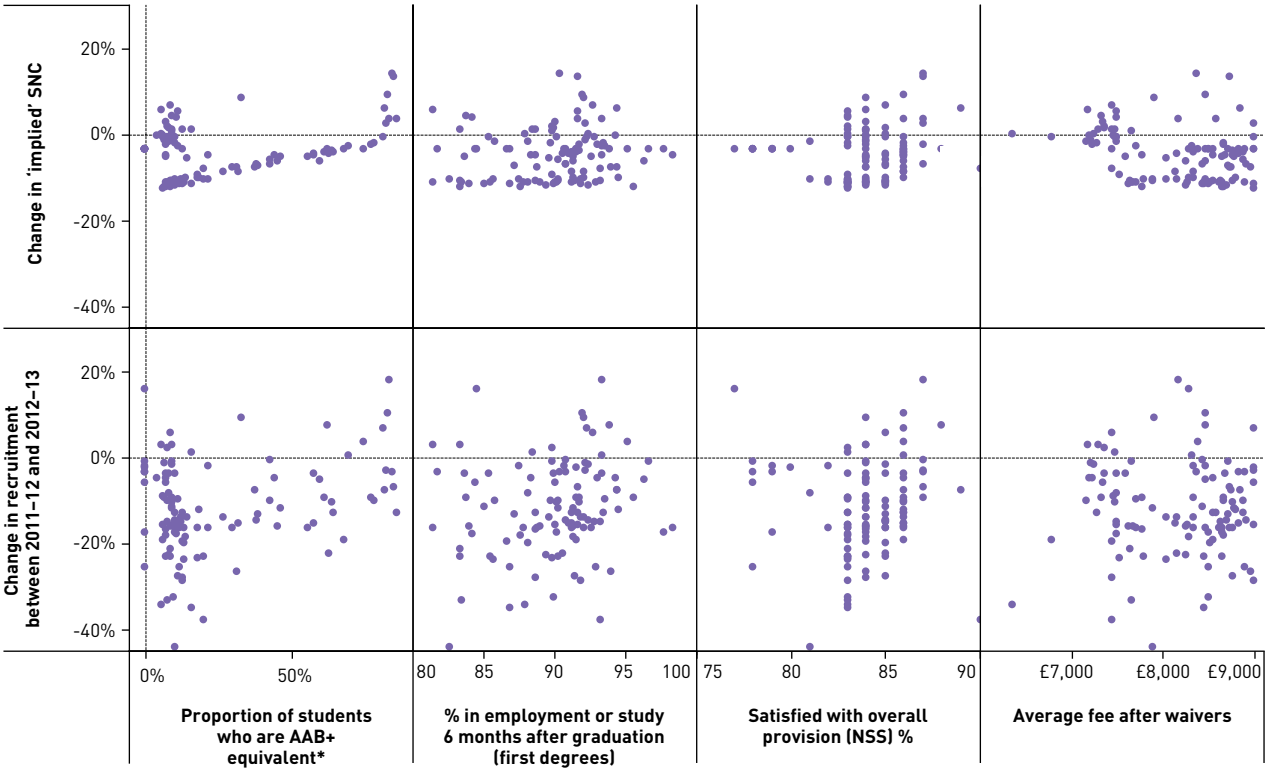


Based on projections (not actual outcomes) of the AAB+ population in 2012–13.

Source: HEFCE

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

Figure 2.29: Change in entrants at higher education institutions in England by selected measures



*Based on projections (not actual outcomes) of the AAB+ population in 2012–13.
Source: HEFCE, HESA, National Student Survey, and Office for Fair Access

2.6 Factors driving outcomes of the 2012 admissions cycle for students and institutions

This section summarises the main factors contributing to the fall in the numbers of students accepted for entry in 2012 across the UK, building on the analysis in sections 2.4 and 2.5. Factors mentioned in earlier sections include:

- Changes in the behaviour of those applying in relation to deferral of entry
- Changes in the behaviour of mature students
- Changes to institutional behaviour arising from policy changes to student number controls

Section 2.5.2 showed that for institutions in England, a significant factor underpinning changes in the number of students entering in 2012–13 compared with 2011–12 was a change in applicant behaviour in relation to deferrals. For English institutions in 2010 around 23,600 students chose to delay their entry until 2011–12, but in 2011, less than half this number chose to delay their entry until 2012–13. This contributed to a more pronounced fall in the number of students entering English institutions in 2012–13. There are early indications that the number choosing to defer entry to 2013–14 is returning to more typical levels (of around 20,000). Therefore the impact of deferral behaviour of applicants is likely to be only a temporary factor causing changes to the pattern of entry in 2011–12 and 2012–13.

Section 2.4.2 discussed the behaviour of mature students in relation to applying for, and accepting, entry into higher education. There has been a fall in the number of mature applicants applying to higher education since 2010, and this fall was more pronounced in 2012 at 9.2%, a fall of 17,520 applicants from the previous year. It is unclear whether this is a temporary factor, or a more permanent trend which may continue into the 2013 cycle and beyond.

Section 2.5.3 examined how the restrictive nature of student number controls in 2012–13 may have had an impact on institutional recruitment strategies, leading in part to the fall in acceptances. There is evidence to suggest that in 2012, institutions made a smaller number of offers in a more selective manner, to a smaller cohort of applicants. Fewer offers of places were made to UK and EU applicants who selected five choices, reflecting the decrease

in applicants in that year. However, the number of applicants receiving five offers increased – the only group to do so – suggesting a concentration of offers on specific candidates. This may reflect competition for applicants with entry qualifications that place them in the deregulated pool, or increased competition between providers. As the number of acceptances per offer for institutions did not change in 2012–13, the impact of concentrating offers on a smaller population of students is estimated by UCAS to have led to 26,000 fewer acceptances in 2012.

As a result, some institutions may have recruited fewer AAB+ students than anticipated, and were unable to lower the threshold for entry in response as they may have in the past. The small band which institutions could aim for, given the prospect of penalties for over-recruitment and loss of places for under-recruitment, may have led to a more guarded and less responsive approach to recruitment than anticipated.

Universities UK has carried out interviews with a sample of vice-chancellors on the outcomes of the 2012 recruitment cycle. Common themes emerged, with institutions reporting:

- The 2012–13 recruitment cycle gave them a clearer indication of their market position within the higher education market, and who their main competitors are
- The importance of HEFCE recognising the unique nature of specialist institutions and exempting them from the majority of student number control policy changes
- Concerns related to the restrictiveness of student number control limits

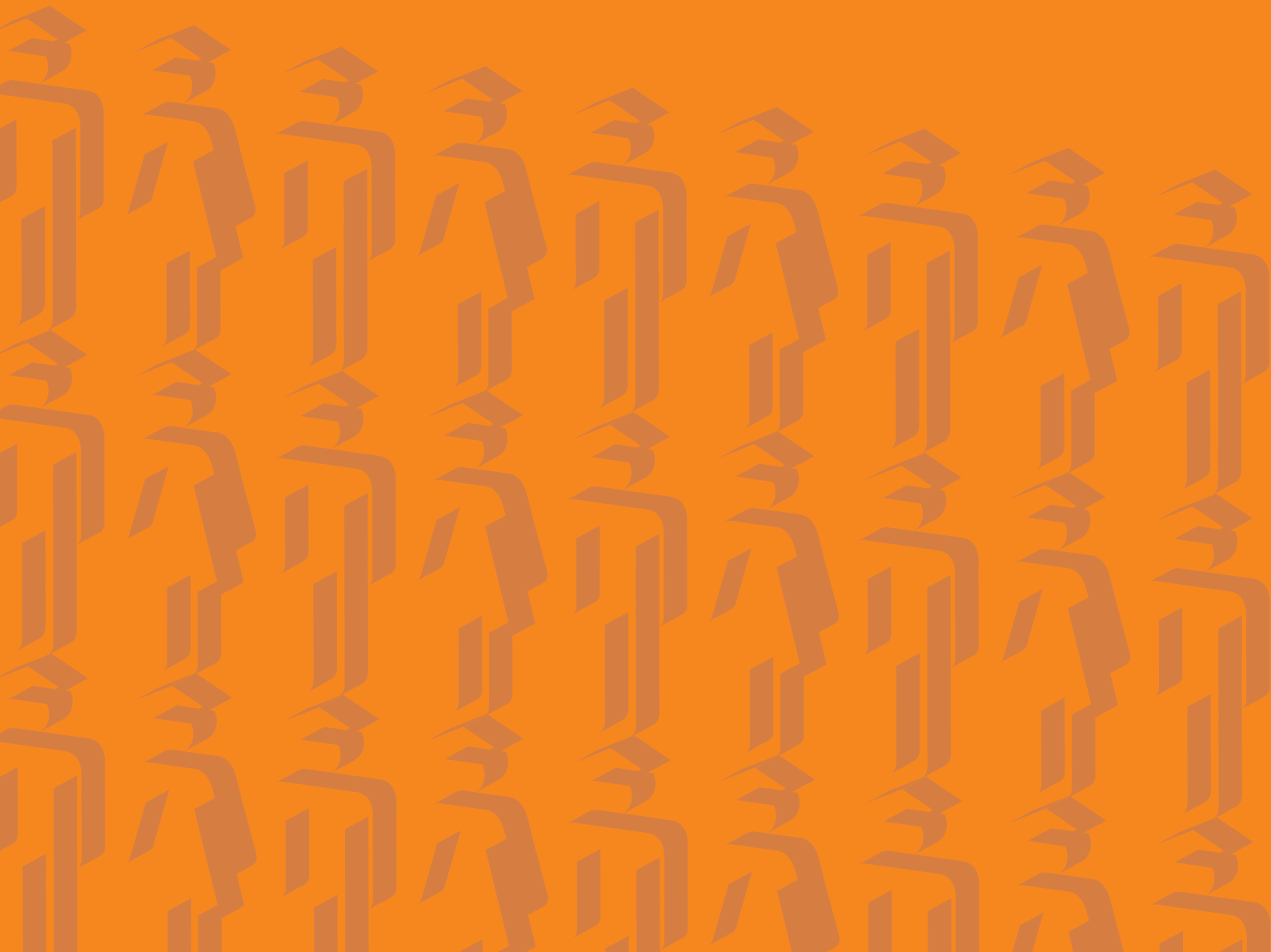
The government has introduced significantly more flexibility around institutional student number controls for 2013–14, with 3% flexibility above total recruitment in 2012–13, along with clarification of penalties for over-recruitment in 2012–13. The government has also confirmed the move to deregulation of student numbers for those with entry grades equivalent to ABB or above at A-level for 2013–14. The 5,000 places used to create the margin in 2013–14 will not be removed from the core numbers of all institutions. These measures could help institutions with their recruitment strategies and for the supply of places to better match the demand from students in 2013–14.

Looking ahead to the 2013 cycle, Universities UK has carried out interviews with a sample of vice-chancellors about their preparations so far. While a wide range of experiences were reported, common themes emerged, including:

- Institutions following through on the results of internal reviews and market research to develop their offer and ensure it is competitive
- Continued marketing drives and consideration of financial incentives to target particular segments of students
- Anticipation that competition will be much sharper this year to attract students. The move to deregulation of ABB+ equivalent students is not expected to create major changes for some institutions, whereas for others it has meant developing a more in-depth understanding of the interaction between their student number controlled places and deregulated numbers
- A perception that demand patterns are not overly responsive to changes in fee levels, with other factors (such as employability, location and course offerings) being much more important
- Continued concerns about over-recruitment, though the additional flexibility on student number controls has been welcomed

CHAPTER 3:

THE MARKET FOR UK- AND EU-DOMICILED POSTGRADUATE STUDENTS



3.1 Scope of this chapter

This chapter examines outcomes for UK- and EU-domiciled postgraduate students, with a focus on outcomes leading up to 2012–13. It covers all UK- and EU-domiciled postgraduate students studying at all UK institutions.

3.2 Overview of funding arrangements and availability of data

Changes to the funding arrangements for higher education outlined in chapter 2 will create change across the breadth of the UK's teaching activities, including postgraduate study. While funding changes that directly affect postgraduate study in 2011 have been on a much smaller scale than those affecting undergraduate study, there are concerns that the indirect effects of the reforms to undergraduate study on postgraduate study may be significant.

3.2.1 Funding sources for postgraduate students

There is no generic student support package for postgraduate study comparable to that for undergraduate study. Students undertaking postgraduate study pay tuition fees up front and are unable to access financial support in a consistent way to cover the cost of tuition fees. Relatively little information is available about the way in which taught postgraduate students finance their studies. Whilst anecdotal evidence suggests that tuition fees are met primarily by the students themselves, there are also increasing instances of employers making a contribution towards fees.

The only mainstream source of funding available to postgraduate students in England is via the Professional and Career Development Loans (PCDLs). A PCDL can be used to fund courses that enhance job skills and career prospects and may be used to cover fees, course costs and other living costs. Loan amounts can be up to £10,000 but the terms differ from a tuition fee loan at undergraduate level in that it is a commercial loan offered by a high street bank and as such attracts a commercial rate of interest. During the period of study the interest payment is made by the UK government but subsequently the loan must be repaid in the same way as any other commercial loan. Table 3.1 provides a summary of the number and average value of PCDLs made over the past three years.[13]

Scottish students are able to access funding for some designated courses, predominantly those at diploma level. This funding is made available in the form of a loan from the Scottish government which is repaid on an income contingent basis in the same way as undergraduate loans are repaid.

Research councils have traditionally provided funding for postgraduate research (PGR) students through studentships, which provide successful applicants with a stipend to cover living costs as well as funding to cover the tuition fee. However, they have recently moved to a new model of funding for PGR students based on establishing doctoral training centres. These centres enable cohorts of PhD students to undertake a programme of training often in a multi-disciplinary environment, thus signifying a shift away from the 'lone scholar' model that has long prevailed in doctoral training.

3.2.2 Funding sources for institutions

Income to institutions in England to support postgraduate taught (PGT) provision comes primarily from tuition fee income and teaching grants allocated by the Higher Education Funding Council for England (HEFCE). Most PGT tuition fees are unregulated and as such institutions are free to set their own fee levels in line with market rates. HEFCE funding is allocated

Table 3.1: Professional and Career Development Loans, 2009–10 to 2011–12

	2009–10 FY	2010–11 FY	2011–12 FY
Total number of PCDL applications*	20,600	19,200	22,700
Total number of PCDLs offered (and taken up)	12,239 (8,320)	8,333 (7,679)	(8,900*)
Approximate number of PCDLs taken up for postgraduate study*	6,400	5,700	6,200
Average loan value*	£6,700	£7,000	£7,500

Source: BIS

FY: Financial Year

*rounded to nearest hundred

13. Department for Business, Innovation and Skills

on the basis of price groups which are determined by the average cost of teaching provision in particular subject areas. As part of the teaching funding reforms published in 2011, HEFCE announced that it would be withdrawing funding for all PGT students other than those in the highest cost subject areas. This would have reduced the volume of PGT provision receiving HEFCE funding from 60% to just 17%. In January 2012 HEFCE announced that it would reinstate funding for PGT students in all but the lowest cost subjects. The additional allocation of £1,100 per PGT student in price bands A, B and C will provide a short-term solution to sustainability of provision but consideration will need to be given as to the appropriate level of public funding in the future and the method by which this is allocated. The total cost of this interim allocation is expected to be around £39 million in 2012–13.

In Wales the Higher Education Funding Council for Wales provides direct grants to institutions for postgraduate provision based on the number of credits taught at a rate determined by the academic subject category. This is supplemented by per capita funding at the rate of £100 per student. Unlike full-time undergraduate provision, postgraduate provision does not qualify for premium funding for high cost or priority subjects. A premium for disabled postgraduate students and for credits taught through the medium of Welsh is provided.

In February 2013, the Scottish Funding Council announced that it would be funding an additional 850 PGT places across 18 Scottish institutions. The additional places will focus on courses that support industry and total funding will amount to £6.2 million in 2013–14.

Funding to support the provision of PGR is arguably more complex than for PGT. In England, the main sources of funding to support doctoral training are HEFCE, Research Councils UK and tuition fees. HEFCE provides funding through its research degree programme (RDP) supervision funding. This is a formulaic allocation made to institutions on the basis of the number of PhD students and the quality of research activity in individual academic departments, determined by 2008 Research Assessment Exercise outcomes. From 2012–13 the HEFCE allocation to institutions to support the delivery of doctoral programmes increased by £35 million to £240 million per annum. The allocation method for this funding prior to 2012–13 did not take into account the quality profiles of departments and used a minimum quality threshold to determine eligibility. The inclusion of a quality weighting is intended to allocate funding more selectively on the basis of quality.

3.2.3 Availability of data

As set out in section 2.3, there is a substantial lag between publicly available data and the outcomes for 2012–13 entry, with final data on the number of students enrolling in university not being available until early 2014. In addition, those undergraduates entering in 2012–13 are not likely to progress on to postgraduate study until 2015–16 at the earliest. As such, the impact of the reforms to undergraduate study in 2012–13 on the postgraduate cohort are not likely to be felt until 2015–16 (Table 3.2).

Therefore the remainder of this chapter explores recent trends in postgraduate study in the run-up to 2012–13, with a particular focus on the available enrolment data up to 2011–12.

Table 3.2: Timescales of outcomes and evidence for recruitment of postgraduate students

Year	Announcements and actions relating to postgraduate recruitment	Evidence of outcomes (source)
2006	Entry of first undergraduate cohort paying variable tuition fees	
2009	First graduating cohort from variable tuition fee regime & first opportunity for this cohort to apply for PG study	
2011		Student data published revealing enrolments for PG study in 2009–10 (HESA)
2012	Entry of first undergraduate cohort paying up to £9k tuition fees	
2015	First graduating cohort from £9k fee regime & first opportunity for this cohort to apply for PG study	
2017		Student data published revealing enrolments for PG study in 2015–16 (HESA)

3.3 Outcomes for UK- and EU-domiciled postgraduate students in the run-up to 2012–13

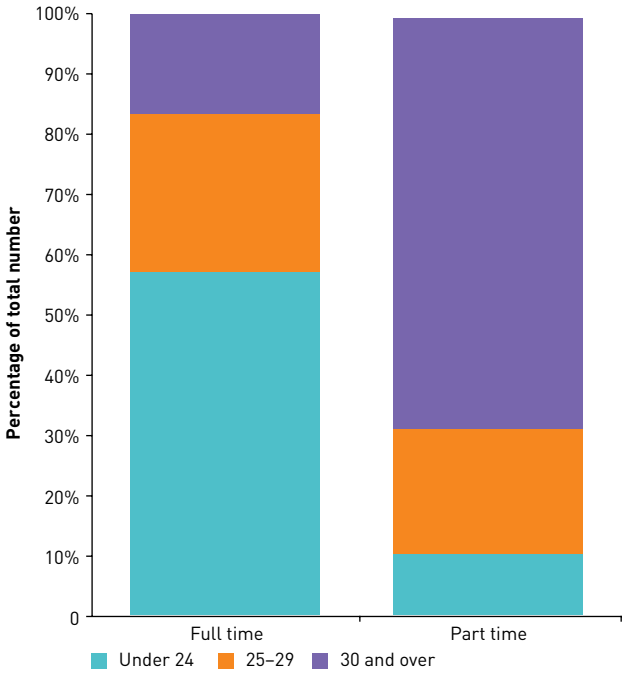
3.3.1 Trends in taught postgraduates

There are currently 459,440 students registered on PGT programmes in UK higher education institutions. The end of the last decade saw a slowing in the growth in PGT recruitment that had been evident at the turn of the century. Whilst domestic recruitment had already begun to slow, this was masked by the considerable growth in international students (Table 3.3).

The PGT population is incredibly diverse and is markedly different from the undergraduate population in that around 50% of all PGT students study part time and around 66% are over the age of 25 (Figure 3.1). Motivations for undertaking postgraduate study are similarly diverse and flexibility of provision is increasingly important. In 2011–12, 13% of all registered PGT students were studying via distance learning.

Over the past decade the number of PGT students in the UK has grown significantly: around 25% since 2002. This growth has largely been driven by increased numbers of non-EU students. Non-EU student numbers have increased by 98% since 2002–03 compared with just a 7% increase in home and EU students over the same period. This has resulted in the proportion of non-EU postgraduate students increasing (Figure 3.2).

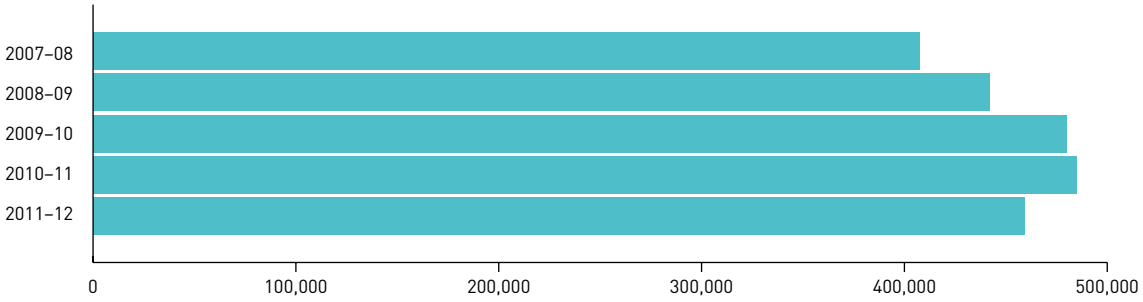
Figure 3.1: Composition of taught postgraduate students by age and mode of study, 2011–12



Source: HESA

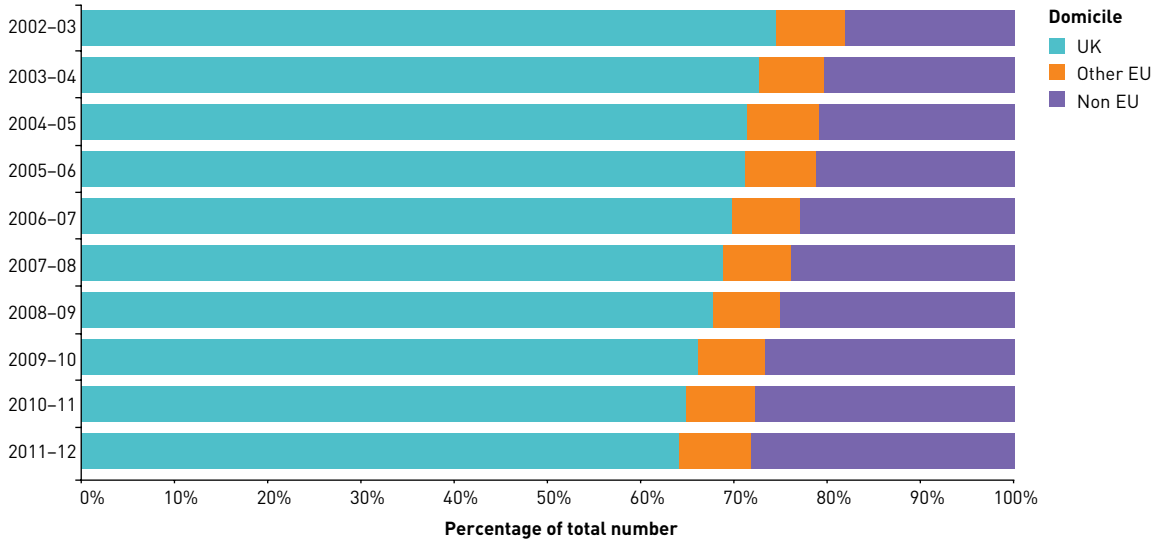
Table 3.3: Total number of taught postgraduate students, 2007–08 to 2011–12

	2007–08	2008–09	2009–10	2010–11	2011–12	% change between 2007–08 and 2011–12
Full-time	181,980	200,885	227,770	235,235	230,445	27%
Part-time	225,590	241,235	252,025	249,630	228,995	2%
UK	280,195	299,270	317,005	313,935	294,295	5%
EU	29,540	31,610	34,625	36,270	35,405	20%
Non-EU	97,835	111,240	128,165	134,660	129,740	33%
Total	407,570	442,120	479,795	484,865	459,440	13%



Source: HESA

Figure 3.2: Taught postgraduate students by domicile, 2011–12



Source: HESA

However, 2011–12 Higher Education Statistics Agency (HESA) data suggests that this trend is also changing, with – for the first time – a fall in PGT student numbers for students from all domiciles. Whilst most institutions have experienced a reduction in PGT student enrolments in some or all of these categories, some have seen larger reductions than others. Recent data published by HEFCE suggests that whilst the level of new entrants to full-time PGT study has remained steady over the past three years, new entrants to part-time study have fallen by around 27% over the same period. This may, to some extent, reflect the current economic climate and changes in the labour market but it will be important to monitor this carefully in the future to ensure that any underlying issues and trends are identified.

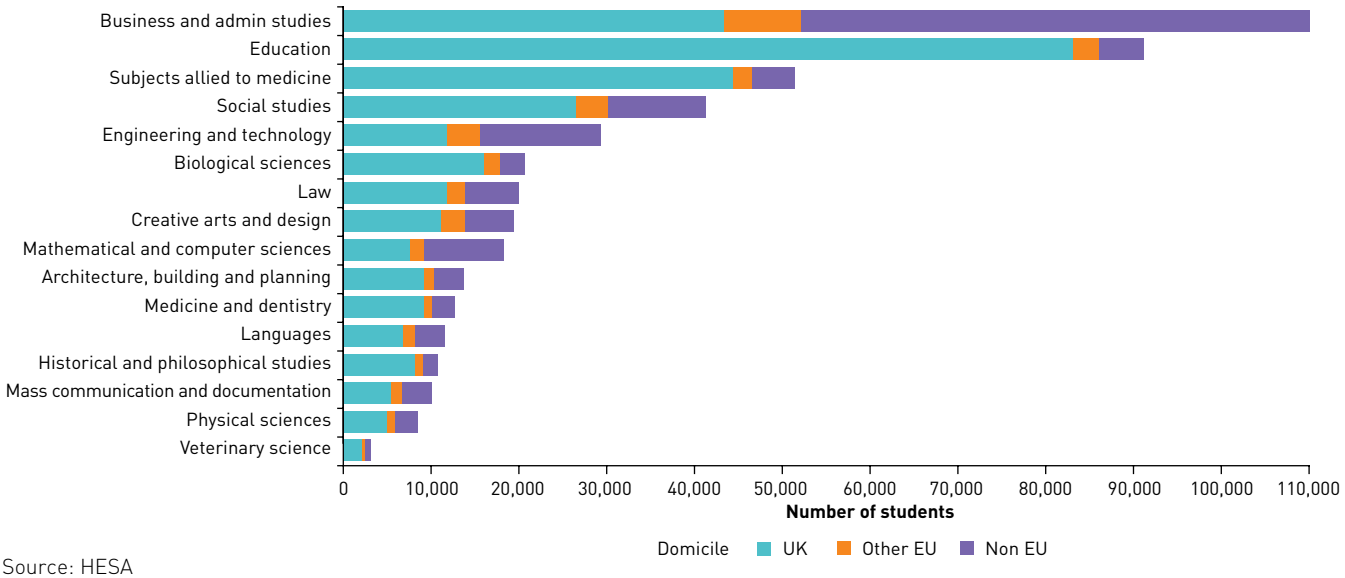
In terms of subject of study, over 60% of all PGT students are registered on courses in just four main subject areas: business and administrative studies, education, subjects allied to medicine, and social studies (Figure 3.3). However, when this is broken down by domicile it becomes clear that some subject areas are heavily reliant on non-EU students. Around 50% of students are from outside the EU in each of business and administrative studies, mathematical and computer sciences, and engineering and technology. In comparison, only 6% of students in education, 10% in subjects allied to medicine, and 14% in biological sciences are from outside the EU.

The distribution of PGT across the sector is also variable, with just 10 institutions recruiting almost 20% of total PGT numbers (Figure 3.4). For eight institutions, PGT students make up more than 50% of their total student populations.

Universities UK has carried out interviews with a sample of vice-chancellors about the outcomes of 2012–13 entry for PGT students. There were many common experiences arising from the interviews:

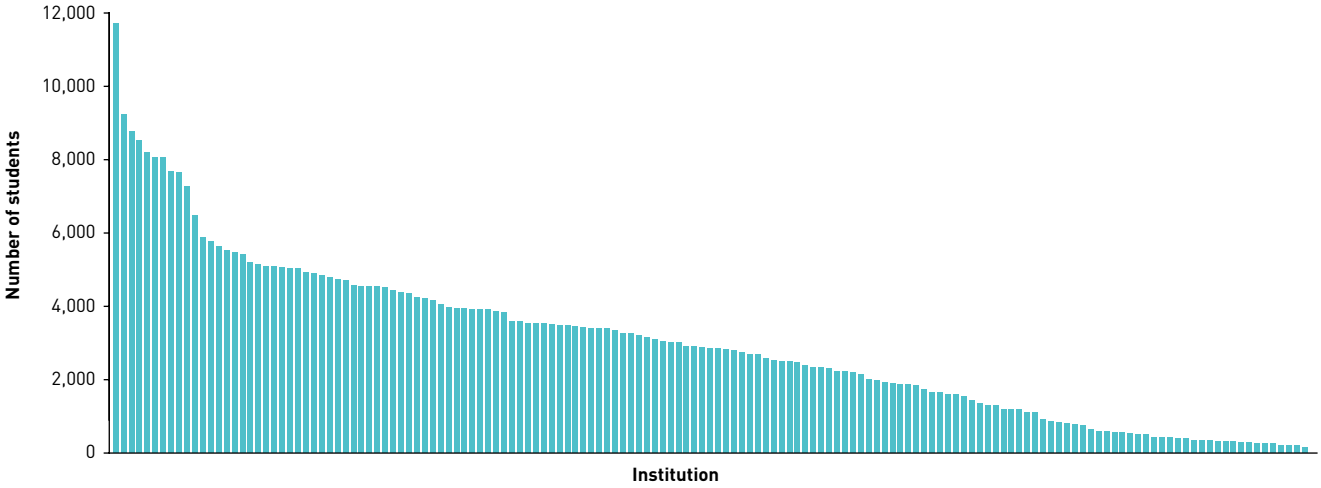
- Almost all institutions experienced general falls in UK-domiciled PGT students. However, demand from UK-domiciled students for some subjects remained strong, though these subjects varied according to the institution surveyed.
- There was general recognition that increases in international PGT students had compensated for recent falls in UK-domiciled PGT students.
- The fall in UK-domiciled students was part of a longer-term trend but was also attributed to the economic downturn. The higher education reforms were not currently seen as being a main factor behind falls.
- Many institutions were conscious of the need to be more innovative in the provision of PGT courses, to remain competitive domestically and internationally. Institutions are looking into the options around distance learning and more flexible provision in order to grow their market share.

Figure 3.3: Taught postgraduate students by subject of study, 2011–12



Source: HESA

Figure 3.4: Number of taught postgraduate students by institution, 2011–12



Source: HESA

Figure 3.5: Total number of postgraduate research students, 2007–08 to 2011–12

Source: HESA

3.3.2 Trends in research postgraduates

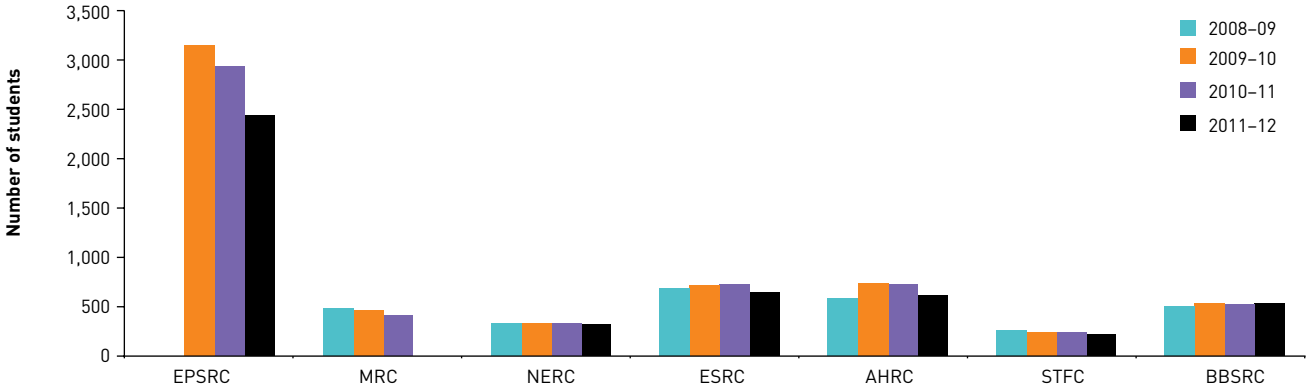
The supply of high quality doctoral students is fundamental to sustaining the UK research base. Doctoral study is important not only for training the next generation of academic staff but also in providing highly skilled researchers to a range of employment sectors. The total number of doctoral students studying at UK institutions has remained relatively stable over the past five years, albeit with a small increase in the number of entrants over the past two years (Figure 3.5). In 2011–12 the number of students in the first year of a doctorate programme was 34,780, an increase of 5% since 2009–10.

As noted in section 3.2.1, research councils have traditionally provided funding for PGR students through studentships, which would provide successful applicants with a stipend to cover living costs as well as funding to cover the tuition fee.

Figure 3.6 shows how the number of PhD students funded in this way varies by research council, with the Engineering and Physical Sciences Research Council funding more than 40% of the total number of PhD students supported in 2010–11. Recent data suggests that the number of PhD starters funded by the research councils has fallen by around 6% per year, from 6,200 in 2009 to 5,200 in 2012.[14] The report by the Department for Business, Innovation and Skills on this data suggests that this is as a result of the 'concentration of scarce resources among the brightest and the best.'[15]

As with PGT students, the distribution of PGR students across the sector is also variable. A higher degree of concentration occurs at PGR level with just 10 institutions recruiting a third of total PGR numbers (Figure 3.7).

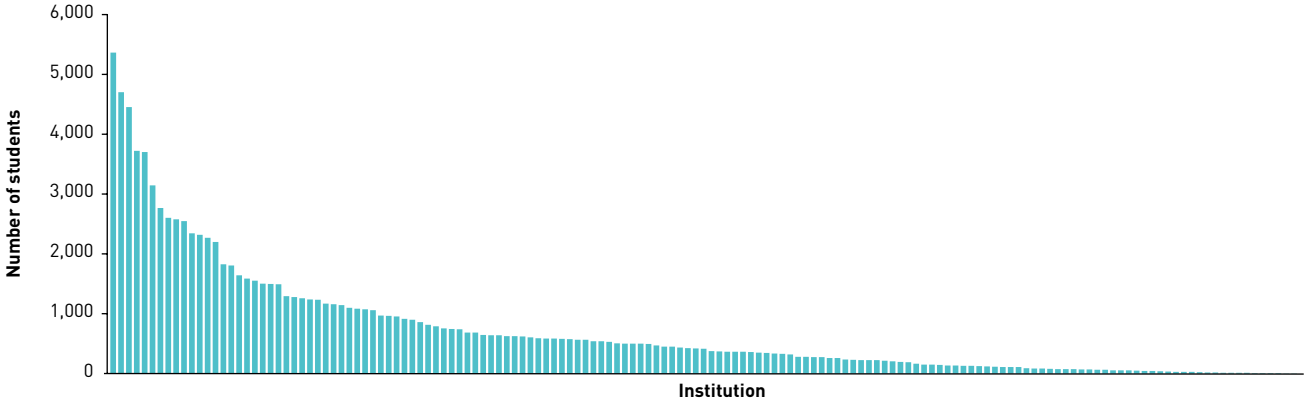
Figure 3.6: Number of PhD students supported by research council funding, 2008–09 to 2011–12



Data for all years not available for all research councils.

Source: research councils

Figure 3.7: Number of postgraduate research students by institution, 2011–12



Source: HESA

14. BIS (2013) *Research Councils Impact Reports 2012*
15. Ibid

There are a number of doctoral qualifications offered by UK universities; the most common research degree in the UK is the doctor of philosophy, awarded on the basis of an extended research project. Other doctorates offered by UK universities include professional doctorates, PhD by practice, integrated or 'new route' doctorates and PhD by publication. The fastest growing of these is the professional doctorate, which allows professionals to undertake work-based research in areas of professional practice.

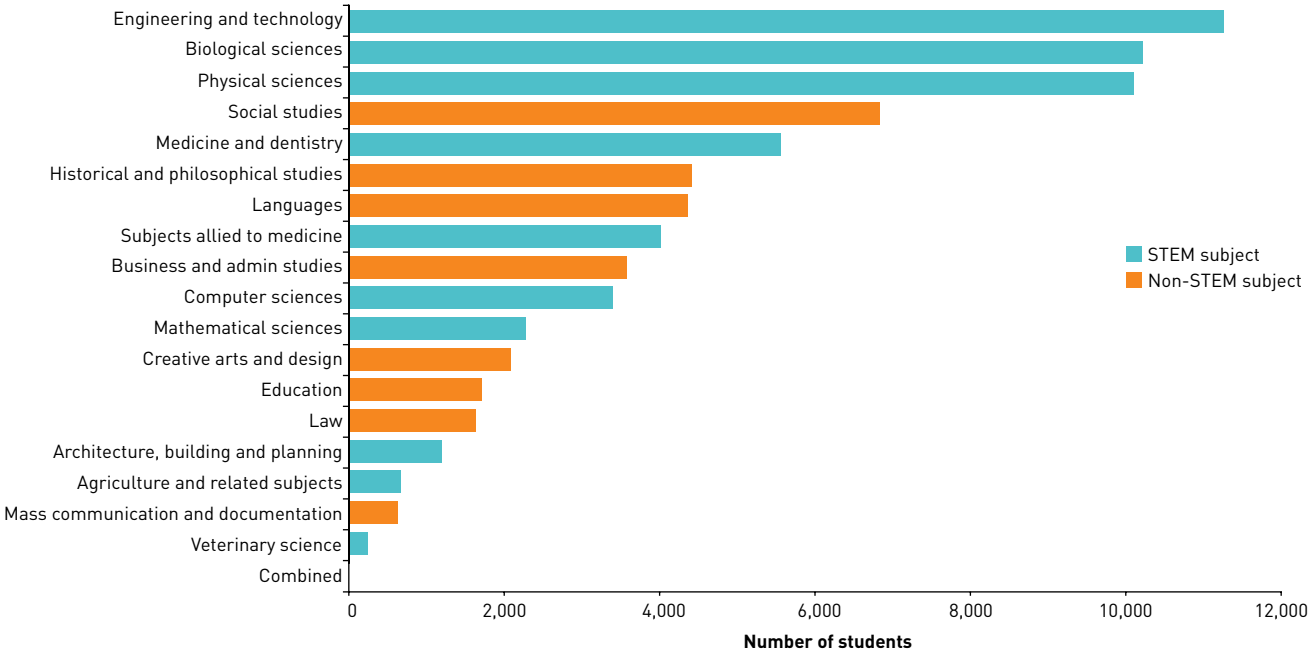
The balance between subjects at doctoral level is currently heavily biased towards science, technology, engineering and mathematics (STEM) subjects, with around 66% of PhD students studying in those disciplines. This would seem to correlate with the availability of funded studentships, which are heavily dominated by the engineering and physical sciences (Figure 3.8). Sustaining capacity in areas of research strength whilst ensuring that innovative and emerging areas are supported is important to retaining the UK's position as a leading research nation. The UK has seen a substantial growth in emerging knowledge-intensive industries such as the creative and digital industries, which will rely heavily on a strong research base in the arts and humanities. It is therefore important to ensure that the sector is able to sustain doctoral provision across disciplines.

3.4 Implications for the UK's higher education sector and economy

Postgraduate students make an important contribution to the UK economy, to society and to the higher education community. Business and industry value the high level skills, subject-specific knowledge and innovative approach that students with a postgraduate qualification bring to the workplace. The evidence suggests that there also continues to be increased private benefits to undertaking postgraduate study. Unemployment rates for those holding a postgraduate qualification are lower than for those with only a first degree, 6% in 2010–11 compared with 7.6% for the student population as a whole. There is also evidence that a postgraduate premium continues to exist; research by the London School of Economics suggests that the wage premium for those holding a masters-level qualification is on average around 15%. The benefit to the exchequer in relation to these higher earnings equates to around 27% on average.[16]

Over the past decade the average proportion of the UK's working population holding a postgraduate qualification has almost doubled, from 4.4% in 2001 to 7.9% in 2011 (Figure 3.9).

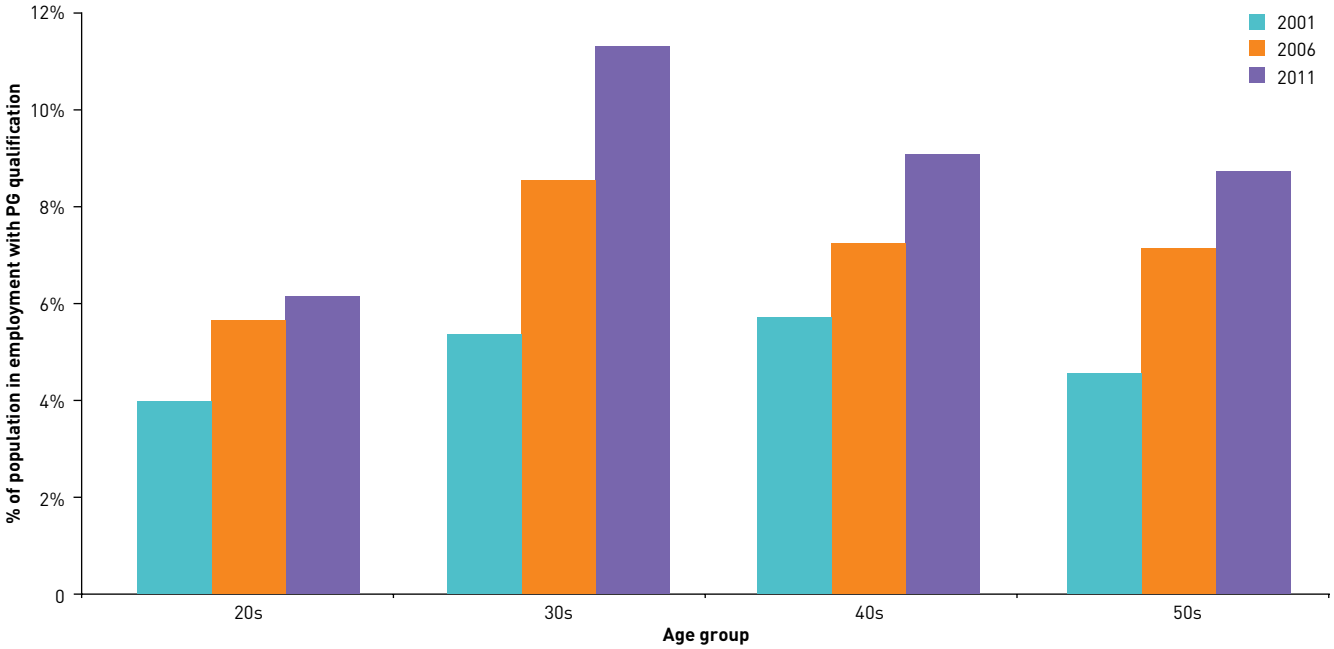
Figure 3.8: Postgraduate research students by subject of study, 2011–12



Source: HESA

16. BIS (2011) *The returns to higher education qualifications*

Figure 3.9: Percentage of UK population in employment with postgraduate qualifications by age, for 2001, 2006 and 2011



Source: HESA

Postgraduate students are employed in those occupations which require the highest level of skills. Of those students entering employment immediately after finishing postgraduate study, more than 60% enter just four occupation types, these being professional occupations (28%), teaching professionals (16%), associate professional and technical occupations (11%) and managers and senior officials (6%).

There is a relatively well-defined career pathway for PhD students wishing to pursue a career in academia; however, there is scope to improve understanding of the career trajectories of those who move into the private sector upon completion of their studies. The Wilson Review of Business-University Collaboration recommended that more structured information about the future career opportunities for doctoral students should be published. It is equally important to ensure that business and industry are engaging with universities, and that the skills of PhD students are meeting employers' needs. A recent study by Vitae[17] found that 43% of doctoral researchers intended to pursue a research career outside of higher education, so it is important to ensure that PhD students have the skills and experience that is valued by other types of employers. One way of improving the interaction between doctoral students and industry is to provide opportunities for doctoral students to undertake industrial work placements as part of their programme of study, to encourage mobility between academia and industry.

Table 3.3 showed a decline in UK students studying at PGT level. There is a risk that the changes to the undergraduate fee level may further weaken demand at postgraduate level. Conversely, students may see a postgraduate qualification as a way in which to distinguish themselves in an increasingly competitive labour market. Some work has been done for postgraduate levels, exploring the extent to which barriers to participation exist, though this work has been largely anecdotal or based on small sample surveys. Nevertheless, this work does suggest that the cost of study and access to financial support is prohibitive to those who do not have the means to support themselves. Research undertaken by the National Union of Students[18] suggests that the availability of finance is a significant barrier to accessing postgraduate study.

Alan Milburn's 2009 report, *Unleashing Aspiration*, raises concerns about routes into professional careers which have increasingly required a postgraduate qualification, for example law and journalism. These courses are often expensive and, indeed, are often preceded by an undergraduate course which can be longer than the average three-year programme.

17. Vitae (2012) *What do researchers want to do? The career intentions of doctoral researchers*
18. NUS (2010) *Broke and Broken: Taught postgraduate students on funding and finance*

Most PGT tuition fees are unregulated and institutions set their own fee levels in line with market rates. This has resulted in these fee levels varying both by institution and by subject. Analysis by the 1994 group[19] found that fees for home and EU PGT students had increased by around 64% between 2002–03 and 2010–11. In 2011–12 the total tuition fee income to the sector from full-time PGT students was £501 million, making up 5% of total tuition fee income and a 3% increase on the previous year. Based on a survey of UUK members, the average standard tuition fee for PGT students in 2012–13 is around £6,500. This is lower than the average undergraduate fee but higher than the average PGR fee, which is £3,800.

It is difficult, at this stage, to predict how student behaviour might be affected by changes in the levels of undergraduate fees, but the ability of postgraduate students to access financial support for their studies would seem to be an important factor in the decision-making process. Given the increasing reliance of the UK economy on higher level skills, any further reduction in demand would have profound consequences for the UK economy and its international position. The financial implications for UK higher education institutions would also be significant.

19. 1994 group (2012) *The Postgraduate crisis*

CHAPTER 4:

THE MARKET FOR NON-EU-DOMICILED UNDERGRADUATE AND POSTGRADUATE STUDENTS

4.1 Scope of this chapter

This chapter examines recent outcomes for non-EU (international) domiciled undergraduate and postgraduate students, with a focus on outcomes in 2012–13. It covers all non-EU students studying at all UK institutions.

4.2 Overview of the reforms to immigration

The government's reform of the student immigration system, implemented since 2011, had the stated intention of reducing the allegedly high level of abuse that existed within the student route, in that some non-EU citizens obtained student visas with no real intention to study once in the UK. In the wider political sense, the reforms will help towards meeting the Conservative Party manifesto pledge[20] to reduce net migration from more than 250,000 per annum to the 'tens of thousands' by the end of this parliament.[21]

As a result, several changes have been implemented that affect international students attempting to come to the UK to study. These affect a student's entry requirements, their entitlements during study and the options available to them once study has been completed.

Any impact of the reforms announced since 2011 (Tables 4.1 and 4.2) would be felt in both the 2011–12 and 2012–13 academic years.

In contrast, over the same period, the UK's main competitor countries, including the USA, Australia and Canada, have been implementing or devising plans to encourage growth in international students.

4.3 Availability of data

Table 4.3 illustrates the timing of actions taken by non-EU students and UK institutions for entry in 2012–13. The corresponding timescale on the availability of evidence to illustrate these actions and outcomes is also shown. Similar to the case with UK and EU undergraduate applicants, there is a substantial lag between publicly available data and 2012–13 outcomes. As with home and EU undergraduate students, UK-wide data in terms of student enrolments for 2012–13 will not be available until early 2014. In addition, data on international comparisons for 2012 will not be available until summer 2014.

Therefore, this chapter focuses on the available enrolment data up until 2011–12, and supplements this with evidence on student perceptions, student visas and intelligence gathered from the sector to give a preliminary view on 2012–13 outcomes. To some extent 2011–12 enrolment data provides an early indication of the full impact of the reforms, given the start of the implementation of the reforms would have affected enrolment of students from the academic year 2011–12 onwards.

Table 4.1: Reforms taking effect in 2011

Reform	Description and effective date
HEI accreditation and enrolments	**April:** All education providers recruiting students from outside the EEA required to have Highly Trusted Sponsor status (by April 2012) and pass an inspection of their educational provision. **July:** Institutions to vouch for academic progression for students changing course.
English language requirement	**April:** Level of competency in English language increased for those coming to study at NQF level 6 (undergraduate) and above, from B1 to B2 in all four components of language.
Evidence of funds	**July:** Students required to sign a declaration that the maintenance funds required are genuinely available; banks must be on UKBA's list of prescribed banks.
Employment	**July:** Work during term time and work placements restricted to international students studying at a 'recognised body' (universities) or a publicly-funded further education college.
Dependants	**July:** Only postgraduate students studying at a university for longer than 12 months, or government-sponsored students, allowed to sponsor dependants.

20. Conservative Party (2010) *Invitation to join the government of Britain: The Conservative Manifesto 2010*. In the year to December 2010, net migration stood at 252,000. Releases are available from the Office for National Statistics.
21. Net migration is a calculation based on the number of people migrating into the UK within a 12-month period, less the number migrating out of the UK. If immigration is higher than emigration (as in the UK), net migration is positive. Where emigration is higher than immigration, net migration will be negative. In the year to June 2012, net migration stood at 163,000.

Table 4.2: Reforms taking effect in 2012 and 2013

Reform	Description and effective date
Time allowed as a student	**April 2012:** Tier 4 visa holders restricted to a maximum of five years of study on courses at degree level, with some exceptions depending on course.
Post-study work	**April 2012:** Tier 1 (Post Study Work) route closed to new applicants, whilst the Tier 1 (Graduate Entrepreneur) route was created for up to 1,000 graduates to develop their innovative ideas and entrepreneurial skills. Upon completion of study, students can now apply for a Tier 2 visa, provided they have a graduate-level job offer from an employer who is a licensed sponsor with the UKBA, and is paying at least £20,000 or the going rate for the job, whichever is higher.
	April 2013: PhD students will be entitled to stay in the UK for up to 12 months after completing their studies, after which time they must start work or start a business. In addition, 1,000 places created for MBA graduates who want to remain in the UK to start a business.
Credibility interviews	**July 2012:** Introduction of a targeted interview system affecting as many as 14,000 student visa applicants deemed as 'high risk'. Interviewees may be asked questions about their immigration and education history, study and post-study plans, and financial circumstances.
	April 2013: In December 2012, the home secretary announced plans to increase the number of interviews to 'considerably more than 100,000', starting financial year 2013–14.[22]

Table 4.3: Timescales of outcomes and evidence for recruitment of non-EU students

Year	Announcements and actions relating to international recruitment	Evidence of outcomes (source)
2010	Net migration target for 2015 adopted. Migration Advisory Committee (MAC) estimates a scenario whereby the inflow of non-EU students to the UK must reduce by 87,000 over three years.[23]	
2011	Entry of first student cohort applying to study in the UK with revised student visa system in place e.g. raised English language requirements.	
2012	Revocation of London Metropolitan University's Tier 4 licence. MAC recommends changes to Tier 2 codes of practice, including pay thresholds for new entrants (including graduates) and experienced workers.	Visa application data by type of education provider shows overseas demand for a UK education has fallen considerably in all areas outside of higher education (Home Office).
2013	Credibility interviews to be rolled out to student visa applicants. More than 100,000 are expected to be conducted in the first year.	Student data published revealing first year non-EU enrolments in 2011–12 (HESA). Internationally-mobile tertiary student data published showing UK's changing share of the international student market in 2011 compared to competitors (OECD).
2014		Student data published revealing enrolments in 2012–13 (HESA). Internationally-mobile tertiary student data published for 2012 (OECD).

22. The Home Secretary, Theresa May, in a speech 'An Immigration System that Works in the National Interest', December 2012
23. Migration Advisory Committee (2012) *Limits on Migration*

4.4 Outcomes for non-EU-domiciled undergraduate and postgraduate students in 2011–12

Students from outside the UK are of great value to the higher education sector, and are of increasing academic, cultural and economic importance. In 2011–12, students from other EU countries and from outside the EU together comprised 17%, or around one in six, of total enrolments across the sector, coming from more than 200 countries. The number of non-EU students enrolled at UK higher education institutions reached 302,680 in 2011–12, up from 229,640 four years earlier (Figure 4.1).

In terms of source countries for international students, China and India dominate, as shown in Figure 4.2. The top ten countries of origin detailed in Figure 4.2 comprise almost two-thirds of all international (non-EU) students enrolled across the sector.

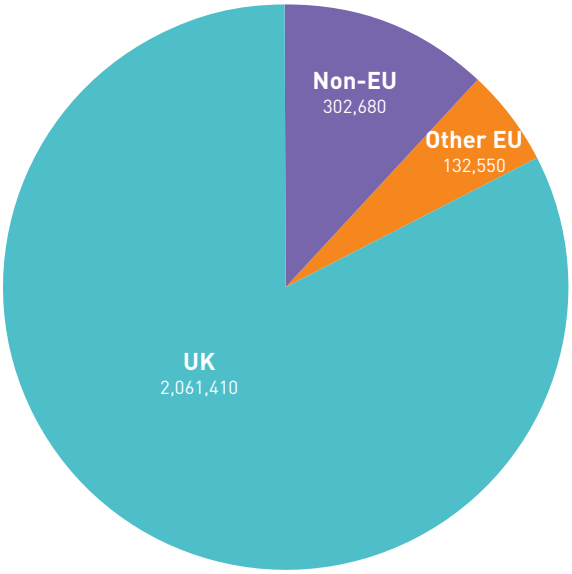
In 2011–12, the number of international students enrolled across all higher education institutions increased by 1.5% on the previous year, to 302,680. However, looking at first year students only (Figure 4.3), a different picture emerges. The overall number of new entrants has decreased, albeit marginally, which is in stark contrast to the growth seen in previous years.

The number of undergraduate entrants did increase, but at postgraduate level, which is the level of study of most international students, numbers fell. Within this, the number of first year postgraduate taught students fell by 2.6% on the previous year, and by 3.7% overall. The number of international new entrants studying STEM subjects fell by almost 8% in 2011–12, from 58,815 to 54,220. The biggest drop in percentage terms was in computer sciences, followed by subjects allied to medicine.

There is significant variation amongst international students in terms of their levels of study in the UK. Figure 4.4 shows how students from different countries vary in their chosen levels of study. For instance, students from Hong Kong (Special Administrative Region of China), Malaysia and China are more highly concentrated within undergraduate study, whilst students from India and Pakistan are more likely to study at postgraduate level. This has significant implications for institutions in their provision of certain courses at certain levels of study, especially when there are fluctuations in demand from specific countries.

Looking at source countries across Asia, the number of students from China continues to grow, whilst significant issues are evident in the recruitment of students from India, Pakistan and Saudi Arabia, where respective falls of 32%, 22% and 31% have occurred (Figure 4.5). In comparison, the number of Saudi Arabian students enrolled in the USA during 2011–12 grew by more than 50% on the previous year.[24]

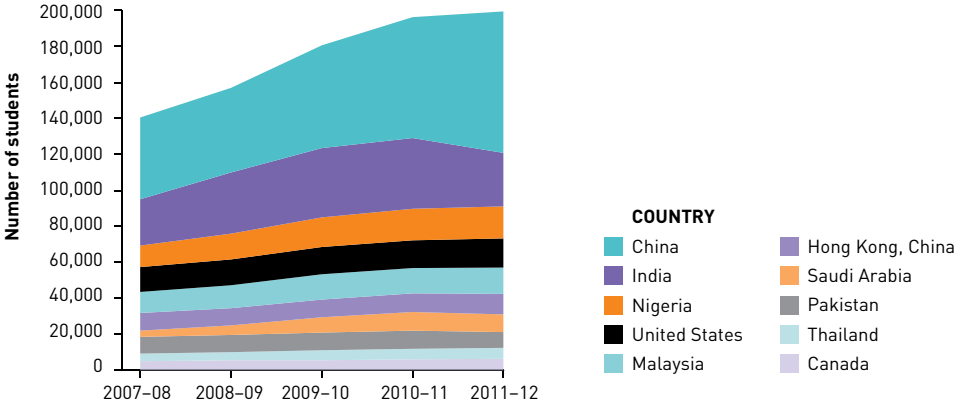
Figure 4.1: Students enrolled at UK higher education institutions by region of domicile, 2011–12



Source: HESA

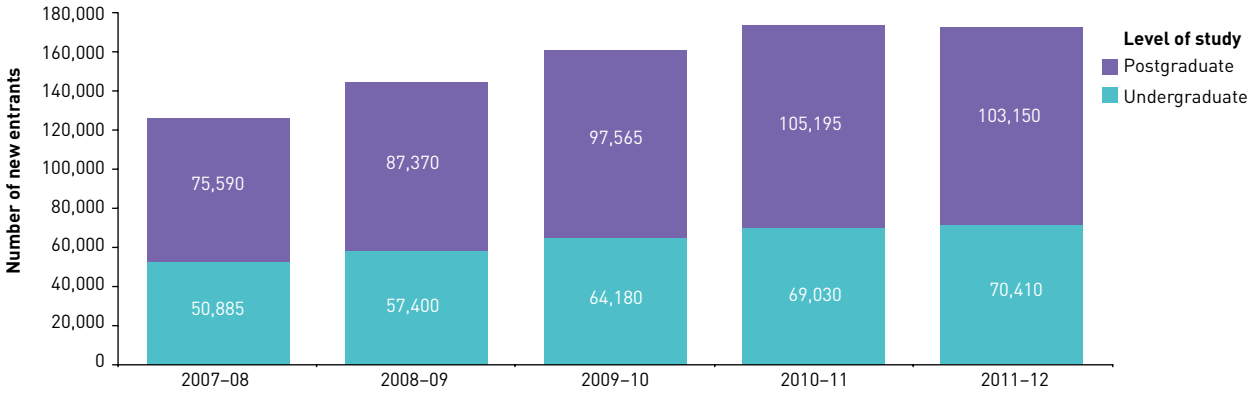
24. Institute of International Education (2012) Open doors data

Figure 4.2: Non-EU students enrolled at UK higher education institutions from top 10 source countries, 2007–08 to 2011–12



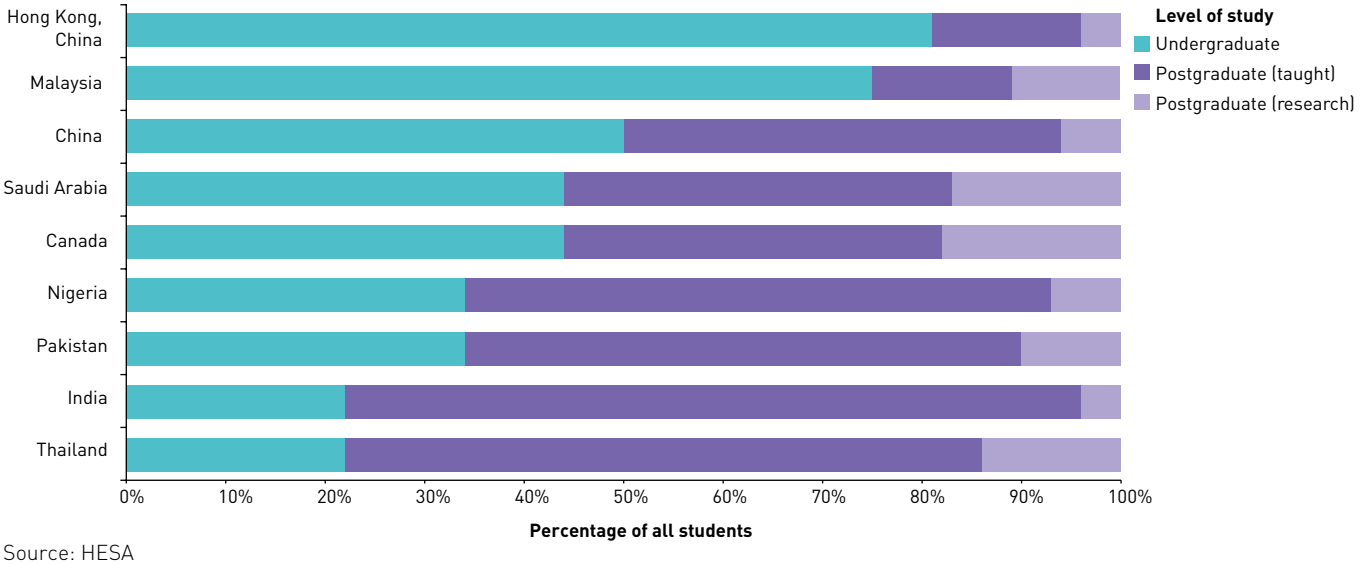
Source: HESA

Figure 4.3: First year non-EU students enrolled at UK higher education institutions by level of study, 2007–08 to 2011–12



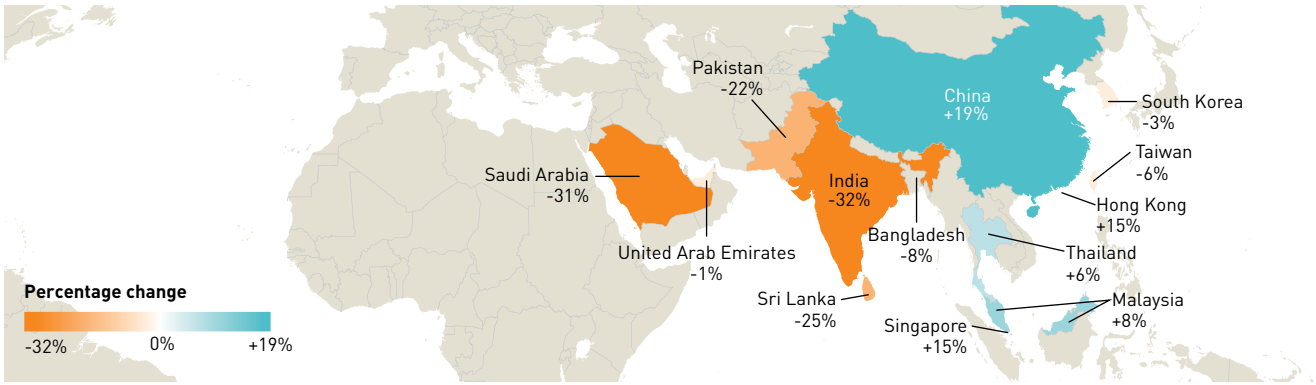
Source: HESA

Figure 4.4: Non-EU students enrolled at UK higher education institutions by level of study, 2011–12



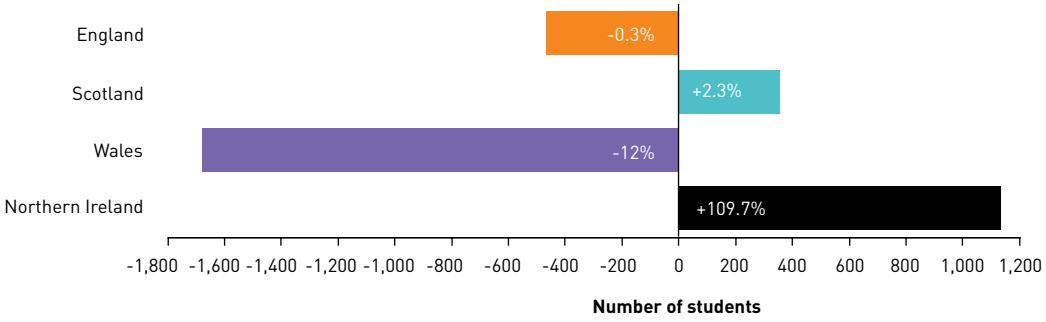
Source: HESA

Figure 4.5: Year-on-year change in the number of first year non-EU students from Asia enrolled at UK higher education institutions, 2011–12 from 2010–11



Source: HESA

Figure 4.6: Year-on-year change in the number of first year non-EU students enrolled at UK higher education institutions, by UK country of institution, 2011–12 from 2010–11



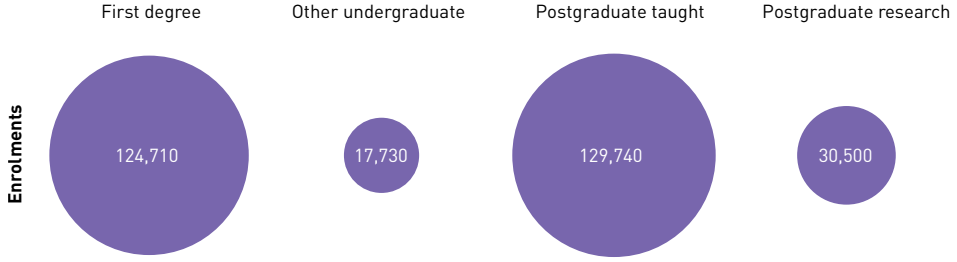
Changes in the number of first year students are by no means uniformly distributed across different countries within the UK, as numbers increased in Scotland and Northern Ireland, but fell in England and Wales in 2011–12 (Figure 4.6).

4.4.1 Taught postgraduates

More than 40% of international students in 2011–12 were studying at taught postgraduate level. Figure 4.7 illustrates this level of enrolments relative to other levels of study.

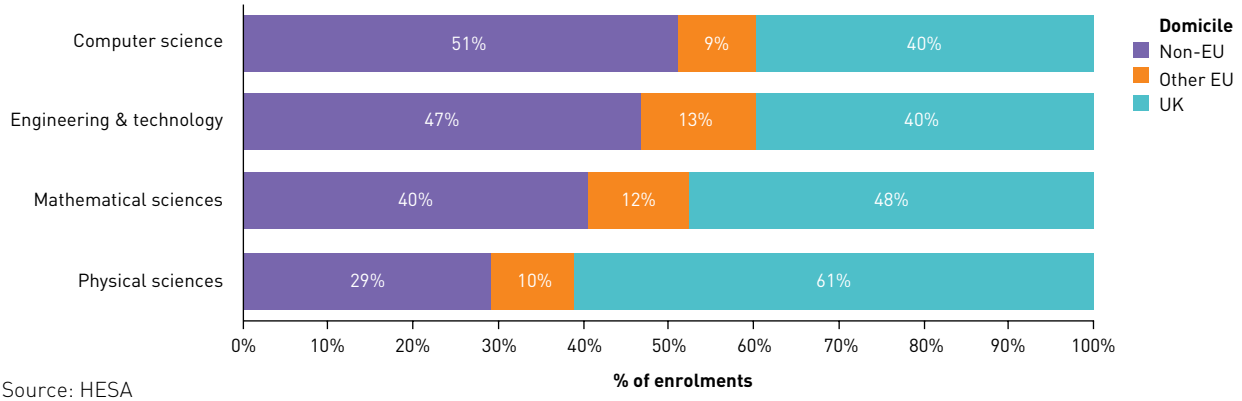
In 2011–12, 28% of all postgraduate taught (PGT) students were from outside the EU, although this varies quite widely if looking across subject areas. For example, over half of all PGT computer science students are non-EU, whilst just under half of all PGT engineering and technology students are non-EU, whereas the proportions are a lot lower for several other subjects (Figure 4.8). Therefore some institutions are particularly vulnerable to fluctuations in demand, with implications for the provision of certain courses with typically lower levels of home and EU student enrolments.

Figure 4.7: Non-EU students enrolled at UK higher education institutions by level of study, 2011–12



Source: HESA

Figure 4.8: PGT student enrolments by selection of STEM subjects and domicile, 2011–12



Source: HESA

Looking at new entrants only, there have been varying levels of change in supply and demand when it comes to international students from different countries. In 2011–12, the number of new entrants from China followed the trend of recent years, showing significant growth. However, this was not the case with students from India, Pakistan and Saudi Arabia, which declined by 35%, 31% and 39% respectively.

Looking specifically at MBA students, as part of its Global MBA rankings analysis, the *Financial Times'* 2012 survey of the top MBA providers in the UK showed that, overall, the number of overseas enrolments has fallen by a fifth since 2010.[25]

4.4.2 Research postgraduates

Section 3.3 highlighted the key role played by international students in maintaining the research base within UK higher education. Looking in more detail at non-EU student numbers, in 2011–12 the number of first year postgraduate research (PGR) students increased by 4% – to over 10,000 for the first time.

Around one in four PGR students are from non-EU countries. Demand from the top two source countries for PGR students, China and the USA, appears to remain strong, which is encouraging given the importance of maintaining the UK's high-quality research base. In 2011–12 there were also increases in the number of PGR students from various other countries, including some where enrolments have fallen for other levels of provision, such as Saudi Arabia and Nigeria. This suggests that academic links continue to be built from a diverse range of countries.

4.4.3 Undergraduates

In comparison to the overall postgraduate market, the number of non-EU undergraduates has continued to grow. In 2011–12, the number of first year international undergraduates increased by 2%, largely due to rising numbers of students from China and Hong Kong (SAR). This was a significant change, as the numbers of UK- and EU-domiciled first years fell.

Of all non-EU undergraduates enrolled in 2011–12, business and administration remains the most popular subject by far, and the number of students studying STEM subjects increased by more than 3%.

4.5 Outcomes for non-EU-domiciled undergraduate and postgraduate students in 2012–13

As outlined in section 4.3, UK-wide data on international student enrolments for 2012–13 will not be available until early 2014. In addition, data on international comparisons for 2012 will not be available until summer 2014. However, this section focuses on a number of relevant sources of evidence to provide a preliminary assessment of 2012–13 outcomes for international students. It examines evidence on student perceptions, student visas, acceptances data for the 2012 UCAS cycle, and intelligence gathered from the sector.

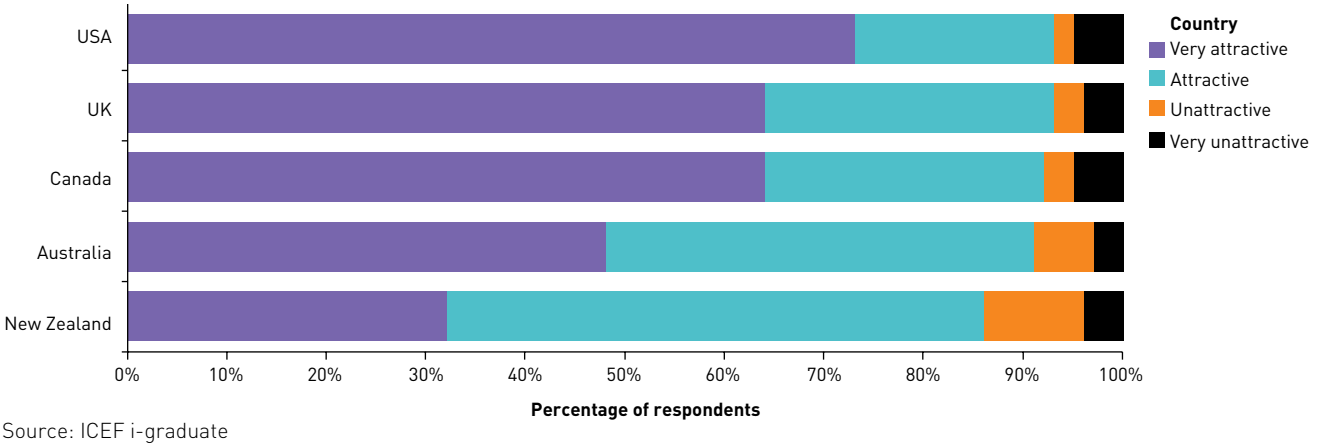
4.5.1 Perceptions of the UK as a study destination

The UK's immigration reforms have received much international media attention. Though there is no cap on the number of international students allowed to enrol at UK universities and post-study work options are available to international students graduating in the UK, albeit with greater restrictions than previously, some international media coverage emphasised that there are significant barriers to studying in the UK.

A recent example of how the UK's attitude towards international students has been perceived overseas includes the reaction to the UK Border Agency's decision to revoke London Metropolitan University's

25. *Financial Times* 21 January 2013

Figure 4.9: Attractiveness of study destinations as reported by education agents, 2012



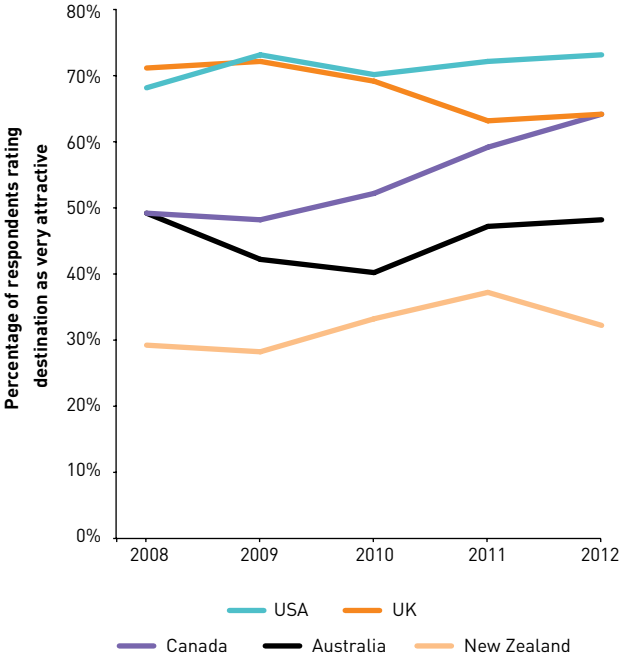
Source: ICEF i-graduate

licence to sponsor students from outside the EU. In certain parts of the world, this has fuelled a perception that the UK is not as welcoming to international students as it perhaps once was, or at least that, in comparative terms, other countries are appearing more attractive to prospective students considering enrolling overseas. The 2012 ICEF i-graduate Agent Barometer, a survey of over 1,000 student recruitment agents from 107 source countries, suggests that the USA is still the most attractive study destination in the eyes of education agents, whilst the UK remains in second place as a 'very attractive' place to study. However, the UK is actually now tied second with Canada, so in this sense has lost ground (Figure 4.9).

In 2012, 64% of respondents rated the UK as 'very attractive'. However, this is down from 72% in 2009 (Figure 4.10). In comparison, Canada's appeal has increased significantly, with 64% of respondents rating the country as very attractive in 2012 compared to 48% in 2009.[26]

This has important implications for 2012–13 entry, as, in the eyes of education agents, Canada is now equally as attractive a study destination as the UK. There have been discussions in Canada on aiming to double the number of international students within this decade to become the 21st century leader in international education.[27]

Figure 4.10: Percentage of education agents rating study destinations as 'very attractive', 2008–2012



Source: ICEF i-graduate

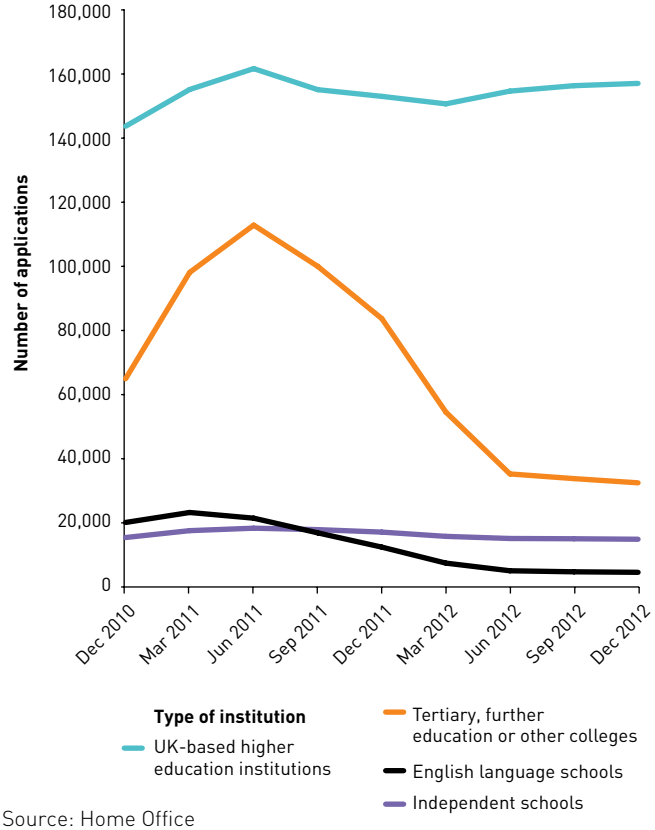
4.5.2 Student visas

A useful indicator of demand is the changing levels of student visas being issued to prospective students for the UK. The number of student visas issued in 2012 was 209,804, a decrease of 20% on the previous 12 months. Meanwhile, visas issued to student visitors (those coming to the UK for up to 11 months and so not counted as 'migrants' in the official statistics) have increased by 11% over the same period.[28]

The Home Office publishes statistics on the number of visa applicants for study using sponsor acceptances, by education sector. It is therefore possible to identify changing levels of visa applications linked to UK higher education institutions within wider student visa data, albeit only as far back as 2010. Figure 4.11 shows that there has been a significant drop in demand for study at further education colleges, whilst higher education demand has fluctuated in recent years.

26. ICEF i-graduate Agent Barometer 2012
27. Advisory Panel on Canada's International Education Strategy (2012) *International Education: A Key Driver of Canada's Future Prosperity*
28. Home Office immigration statistics October–December 2012

Figure 4.11: Visa applications by education sector using Confirmation of Acceptance for Studies, 2010 to 2012



Source: Home Office

The latest available data, for the year to December 2012, suggests that applications have increased by 2.7% on the previous year to 156,537, although they are 2.9% lower than the peak reached in the year to June 2011 of 161,161. Overall, this suggests that demand for higher education has not been as greatly affected as demand in some other education sectors, although it does also suggest that growth for the higher education sector in 2011–12 and the first part of 2012–13 has been limited. Viewed within the wider context of a rapidly growing global international student market, this fluctuation shows that the UK could be losing market share to competitor countries.

4.5.3 Data on international applicants and UUK's survey of institutions

For 2012–13 entry, the data is restricted to those international students applying to study full-time undergraduate courses through the UCAS system. Therefore international students applying directly to institutions and those applying to postgraduate study are not covered. To put this into context, the number of non-EU acceptances via UCAS in 2011 was 34,094, whilst the total number of first year non-EU students across all levels of study in 2011–12 was 173,560.[29]

With these caveats in mind, UCAS data shows that the total number of full-time undergraduates accepting a place at a UK institution increased in 2012, albeit only marginally on the previous year, from 34,094 to 34,286, or 0.6%. Within this, significant growth in the number of students from both Hong Kong (SAR) and Singapore (increasing by 20.8% and 11.4% respectively) was balanced by falls in the numbers from India and Nigeria, of 9.6% and 13.6% respectively.

Due to the partial coverage of the available data, UUK has conducted a series of surveys of its members in order to estimate the impact on 2012–13 outcomes of the immigration reforms, with the most recent survey in January 2013. The results, from over 100 responding institutions, show a degree of variation, with different institutions experiencing different levels of change in demand from international students. However, common themes can be identified.

Our initial survey findings support the idea that the undergraduate market continues to grow, notably due to demand from Hong Kong (SAR) and Malaysia. Interestingly, UCAS notes that, in Hong Kong, the growth in 2012 came after a 'double cohort' of students gained both the new HKDSE and the outgoing Hong Kong A-level exam, leading to a shortfall in local higher education provision.[30] It remains to be seen whether demand from Hong Kong will remain as strong as in 2012, as UUK member institutions have reported changes in the levels of applications for 2013 – although the picture at this stage is by no means consistent. UCAS applicant data as at the 15 January 2013 deadline shows that the number of applicants from Hong Kong has increased by 48, or 1%.[31]

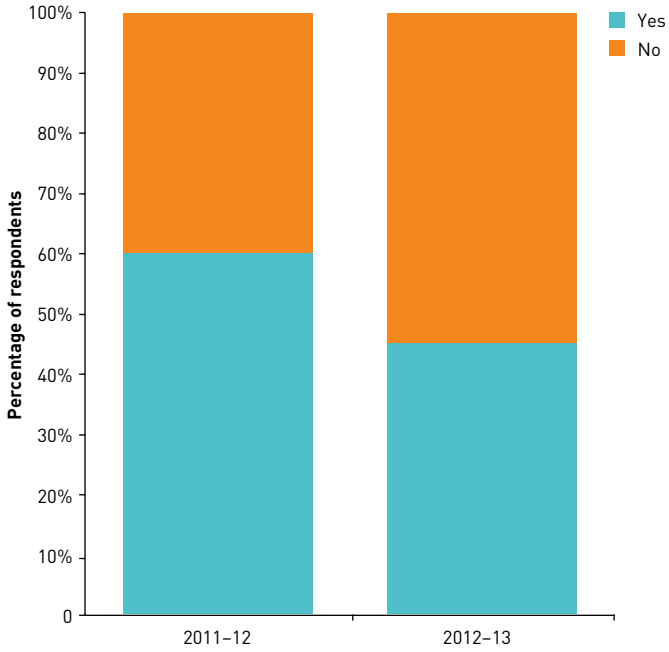
Institutions were asked whether or not they met their international student recruitment targets for the present and previous academic years. Of those who set targets, the percentage of respondents who successfully met them fell from 59% in 2011–12 to 44% in 2012–13 (Figure 4.12).

When asked about changes in the number of new entrants from particular countries, the most frequently-referenced country from which demand had remained strong was China, whilst the most-referenced fall in enrolments came from India (Figure 4.13). Survey responses suggested that increasing numbers of students from China are making up for falling demand elsewhere. However, the increase reported in new entrants from China is mainly concentrated at PGT level, as opposed to undergraduate level, where many institutions actually reported a decline.

29. UCAS (2012) *End of cycle report*
30. UCAS media release, 24 January 2013
31. UCAS cycle applicant figures – January 2013 deadline

Figure 4.12: UUK survey responses to the question:

'Overall, has your institution met its international student recruitment targets for 2011–12 and 2012–13?'



Source: UUK survey

In comparison, according to US consulate services, between October 2012 and February 2013 the number of visas issued to Indian students grew by 50% year-on-year.[32]

As part of the survey, institutions were asked to provide data on the total number of non-EU students enrolled as of December 2011 and December 2012. The data received shows that overall, at those responding institutions, the total number of non-EU students enrolled was higher in 2012 than it was in 2011 (Figure 4.14).

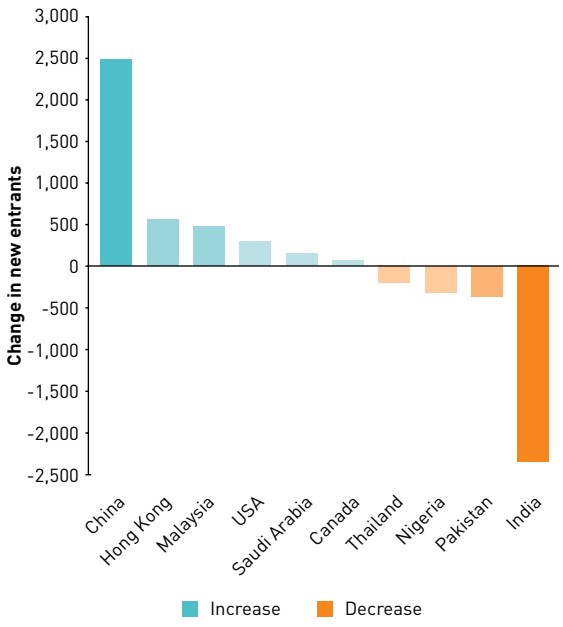
However, it may remain the case that some of this growth is due to increases from previous years, as was evident from the Higher Education Statistics Agency student record data for 2011–12, which showed that, whilst overall numbers were up year-on-year, first year enrolments were down.

The responses received suggest a continuation of some of the trends evident in 2011–12, including:

- an overall increase in the number of undergraduates
- further areas of decline within the number of taught postgraduates

Figure 4.13: UUK survey responses to the question:

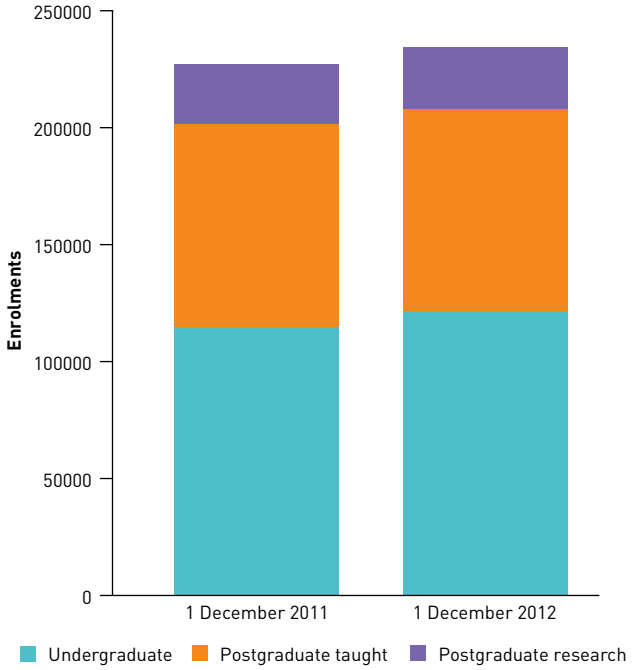
'In 2012–13, have there been any changes in the number of new entrants enrolled at your institution compared to the previous year, by country of domicile?'



Source: UUK survey

Figure 4.14: UUK survey responses to the question:

'In total, how many non-EU students were enrolled at your institution as of:'



Source: UUK survey

32. *Times of India*, 14 March 2013

Further to this, survey responses for postgraduate students suggest that, as of academic year 2012–13, the number of new non-EU taught postgraduates may not yet have recovered to 2010–11 levels. This has significant implications for course provision, as 45% of full-time postgraduate students are non-EU. In comparison, non-EU recruitment to PGR level in 2012–13 may have been as buoyant as in 2011–12.

A further question was posed relating to perceptions of other countries attracting international students perhaps at the expense of the UK, drawing on feedback from agents or directly from recruitment fairs overseas. In line with the agent data highlighted earlier, the USA was the most popular response, followed by Canada and Australia. Other EU and Asian countries were also noted.

4.6 Implications for the UK's international competitiveness, higher education sector and economy

4.6.1 The UK's international competitiveness

The UK attracts more tertiary-level students from overseas than any other country except for the USA. Its share of the global market for international students increased from 10.8% in 2000 to 13.0% in 2010. This can be attributed to the UK's excellence in teaching and research, while offering great diversity in terms of the type of institution and type of courses available at different levels of study.

According to the Organisation for Economic Cooperation and Development (OECD), the size of the market for international students at tertiary level has increased from around 2.1 million students in 2000 to more than 4.1 million in 2010 (Figure 4.15).[33] Further to this, it has been estimated that there will be 7 million students studying outside their country of citizenship by 2020.[34] This is therefore a fast-growing and very lucrative market.

However, currently available data from the OECD goes no further than 2010, and it remains to be seen whether the UK's market share will be resilient amid the falls in international students experienced in 2011–12 and likely fluctuations in 2012–13.

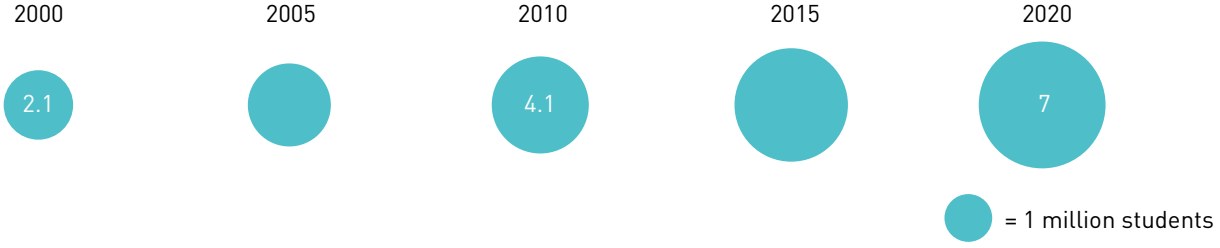
Falls in international student numbers may not only affect the UK's market share – it may also have implications for the UK's global influence. In a 2012 survey by Monocle magazine, the UK was ranked the number one nation in terms of 'global soft power', a measure of how countries use attraction and persuasion, rather than coercion or payment, to change behaviour.[35] Education is a key component of this 'soft power', as overseas study can increase the likelihood of an international student opting to develop business links with the country in which they were educated, as highlighted in BIS's 2012 report on international graduate outcomes.[36] For the UK, sustainable growth of a world-renowned higher education export industry is a key part of such soft power.

4.6.2 The UK's higher education institutions

In 2011–12, students from outside the EU comprised 12% of all higher education students, with notably higher proportions in London (17%) and Wales (15%), and lower proportions in south-east England (7%) and Northern Ireland (6%). Figure 4.16 shows the relative concentrations by region. In terms of overall distribution, however, international students are enrolled at institutions right across the UK. Percentages of non-EU students as a proportion of the total student population vary across institutions (Figure 4.17).

The fall in first year international students in 2011–12, and perhaps stagnation in 2012–13, has had varying effects across institutions. Some have experienced falls from particular countries, which is affecting overall growth strategies to increase the numbers of legitimate international students enrolled, and international staff employed. Others

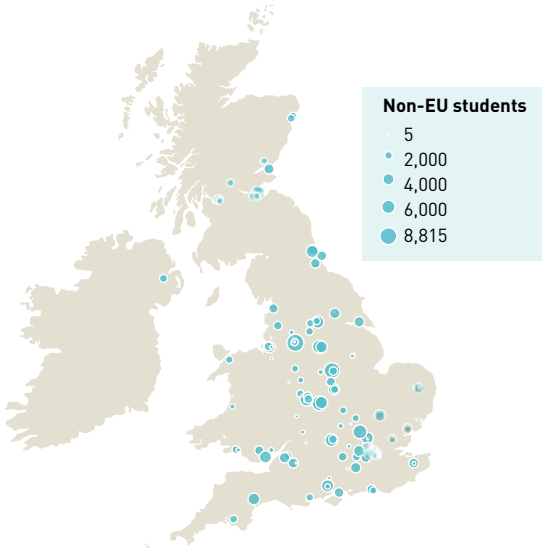
Figure 4.15: Growth in the number of tertiary-level students enrolled outside their country of citizenship, 2000 to 2020



Source: OECD and UNESCO

33. OECD (2012) *Education at a Glance 2012: OECD Indicators*
34. Altbach PG, Reisberg L, Rumbley LE (2009) *Trends in Global Higher Education: Tracking an Academic Revolution*
35. 'Britain is now the most powerful nation on earth' *Independent* 18 November 2012
36. BIS (2012) *Tracking international graduate outcomes 2011*

Figure 4.16: Dispersion of non-EU students enrolled at higher education institutions across the UK, 2011–12



Source: HESA

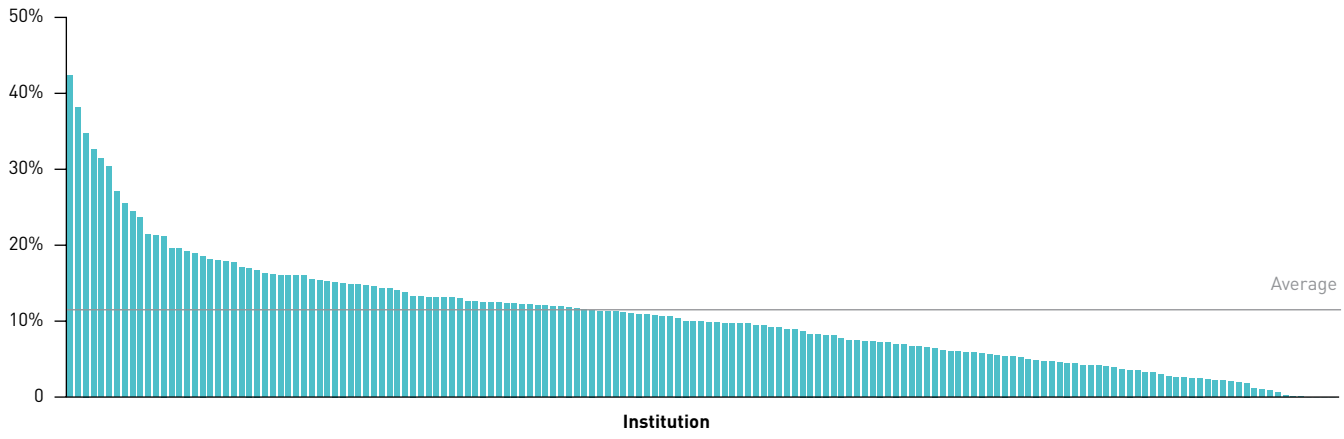
may be continuing to experience growth in terms of overall numbers of international students.

Results from UUK surveys suggest that this growth may not necessarily be reliant on a diverse, truly international market; rather that there may be just a handful of countries that are fuelling demand. Should this be the case, it could expose institutions to a level of risk, should student numbers from a particular country fall due to demographic change, changed perceptions of the UK's attractiveness to study, or if a particular country's exchange rate with Sterling fluctuates, making UK universities more expensive destinations of study. For example, in its work with Oxford Economics, the British Council has forecast that the number of students from China enrolling at UK institutions will fall by around 7,300 between 2011 and 2020, due to a decline in the 18- to 22-year-old Chinese population by that time.[37] This may have significant implications for future growth in international student numbers for some institutions.

In addition to enriching the academic experience, international students generate significant economic benefits for the UK, through income from tuition fees and expenditure in local economies. International student tuition fees represented 11.6% of total sector income in 2011–12 (Figure 4.18). This totalled £3.24 billion, and in recent years has constituted a growing percentage of total income within the sector.

Focusing on England only, the Higher Education Funding Council for England (HEFCE) has said that the sector is projecting an average real-terms increase in non-EU fee income of 24.5% between 2011–12 and 2014–15.[38] However, this disguises a significant variation in assumptions used in predicting future income levels. HEFCE also notes that there is a 'significant risk' that immigration reform and the revocation of London Metropolitan University's Tier 4 licence have caused reputational damage to the UK which could affect student recruitment in a way not reflected in these projections. Recent revisions to forecasts show the sector is now predicting a rise of only 6.8% in non-EU fee income in 2012–13, compared with the rise of 9.9% forecast in 2012.[39]

Figure 4.17: Percentage of student population from non-EU countries by institution, 2011–12



Source: HESA

37. British Council (2012) *The shape of things to come: higher education global trends and emerging opportunities to 2020*
38. HEFCE (2012) *Financial health of the higher education sector*
39. HEFCE (2013) *Financial health of the higher education sector*

In a period of uncertainty over future levels of domestic student demand, the income received through international students' tuition fees plays an increasingly valuable role within institutional finances, especially as some institutions source more than one-quarter of all income from this route (Figure 4.19).

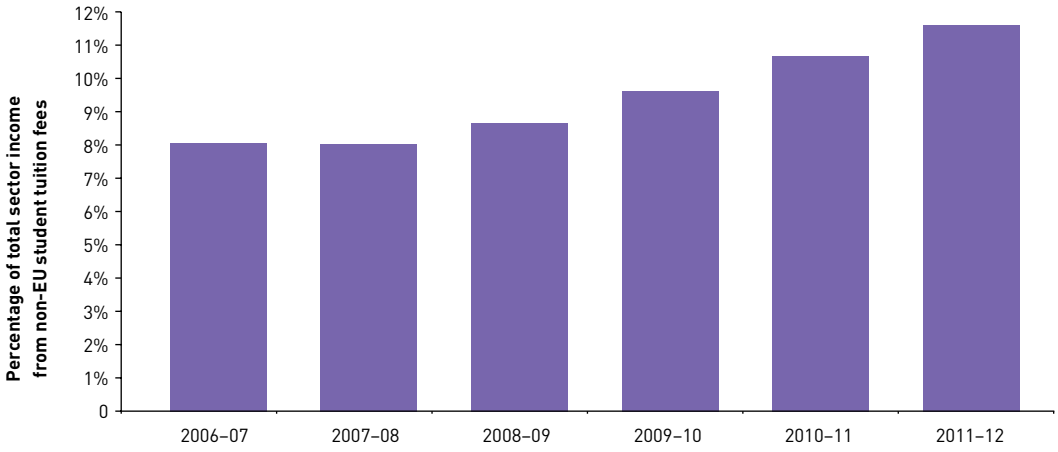
At an institutional level, supposing growth in recruitment remains flat, and that each year tuition fee levels simply increase at the rate of inflation, the percentage of sector income sourced from international students could fall in the medium term, to 2015–16. This would have serious implications for the sector's sustainability in the long term, with a key source of income vulnerable as more students opt to enrol in competitor countries' higher education systems at the expense of ours.

4.6.3 Wider impacts on the UK economy

Education is one of the UK's most successful exports, with EU and non-EU university students worth around £8 billion in 2009.[40] In terms of net exports, education remained one of the most valuable industries that year, behind financial and other business services.[41]

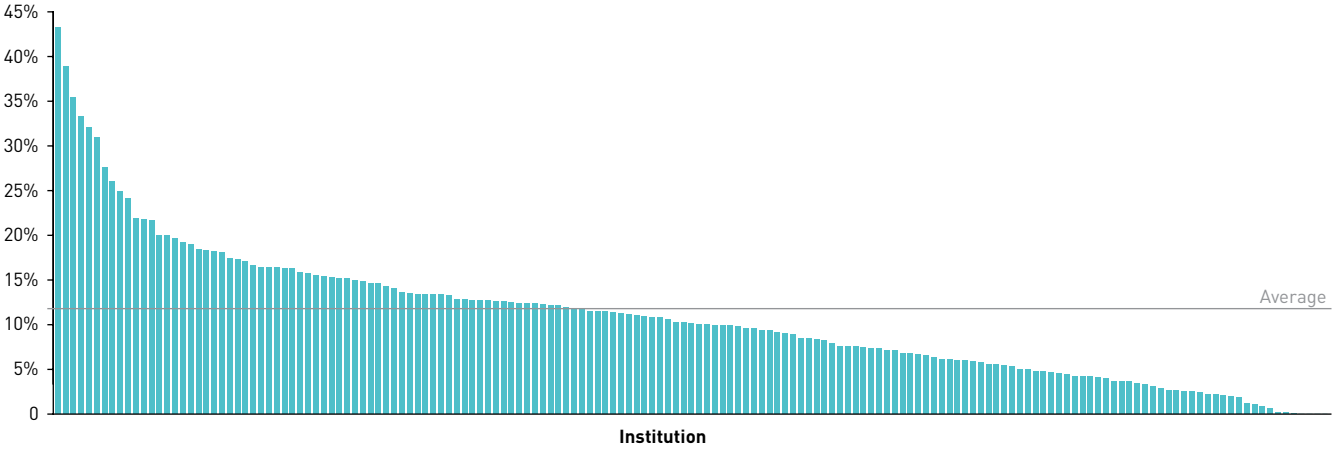
In 2011, London Economics used the academic year 2008–09 as a base to calculate the export earnings gained from the presence of international students in the UK. The breakdown of this, based on the total amount paid by non-EU students in tuition fees, as

Figure 4.18: Percentage of total sector income sourced from non-EU-domiciled students' course fees, 2006–07 to 2011–12



Source: HESA

Figure 4.19: Percentage of total income sourced from non-EU-domiciled students' course fees, by institution, 2011–12



Source: HESA

40. BIS (2011) *Estimating the Value to the UK of Education Exports*
41. Office for National Statistics (2011) *Pink Book*

well as estimates of their off-campus subsistence expenditure, is detailed in Table 4.4.

Applying this methodology suggests that the value to the UK of education exports from the enrolment of international higher education students exceeded £5.2 billion in 2008–09.[42]

By 2011–12, the total number of non-EU students had increased to 302,680. Applying the same methodology employed by London Economics to this cohort of students suggests that export earnings may now be closer to £7 billion.

Table 4.4: Value of education exports associated with the 251,310 international students enrolled in 2008–09

	Tuition fees	Expenditure (non-tuition fee)	Total education exports
Total UK	£2,200m	£3,049m	£5,249m

Source: London Economics

In its updated methodology for 2009 using 2012 prices, London Economics has estimated that each non-UK postgraduate student contributed an average of £22,870 per annum, of which £8,204 was in the form of tuition fee income, and £14,666 was non-tuition fee expenditure. In 2011–12, the total number of non-EU full-time postgraduate students fell by 1% to 139,550. However, had numbers grown at the same rate as in 2010–11, student numbers could well have increased to almost 150,000. This type of shortfall would suggest that the UK has missed out on more than £225 million in education exports, of which around £80 million would have gone directly to institutions via tuition fees.[43]

As has been noted, the number of new entrants fell in 2011–12. Based on institutions' responses to our recent survey, the number of new entrants enrolled in higher education institutions may have increased overall in 2012–13, but there remain some significant differences by level of study. The full picture is not yet known, as we do not have 100% data coverage. However, should growth be limited in this way across the entire sector in 2012–13, as opposed to the strong increases seen in the past, the total foregone export earnings could amount to hundreds of millions of pounds.

The experiences of other countries that have reformed their immigration systems can also provide useful intelligence on the potential economic impact of changes to immigration rules. In the aftermath of 9/11, the US tightened its immigration system, including for students. As a result, the total number of overseas students enrolled in higher education fell by more than 3.5%, from around 586,000 to around 565,000.[44] More recently, parts of the Australian education system have also experienced falling levels of enrolments in the aftermath of changes to the student visa system, although other factors such as the strength of the Australian dollar cannot be discounted. The International Education Association of Australia has estimated that it will take almost a decade for Australian education exports to recover. In fact, the value of Australian higher education exports fell by 5% between 2010 and 2011, as the number of enrolments fell. An even greater decline could be expected for 2012, when the number of enrolments fell by a further 10,000.[45]

In the UK in 2011–12, the total number of international students increased, although the number of new entrants declined. Should a pattern emerge in the UK similar to that seen in Australia, then a 5% fall in the value of UK higher education exports could equate to more than £350 million in foregone earnings in one year alone. Such a change would not be easily reversed, and, as seen in other higher education systems, the effects can endure across several academic years. This could put the UK's strong position within the global education market at risk, and lead to a reduction in exports to the value of £2.4 billion across the entire education sector between 2012–13 and 2024–25.[46]

42. Some international students may have their tuition fees paid for by UK sources (such as central government departments). This portion of the total tuition fee income has been deducted. In BIS's calculations for 2008–09 this totalled £49.9 million.
43. This is likely to be an underestimate in terms of the loss to higher education institutions, given the year-on-year increases in tuition fees since 2009.
44. Institute of International Education (2012) Open doors data
45. Australian Bureau of Statistics (2012) *International Trade in Services* and Boston Consulting Group (2013) *Australia's International Education Strategy*
46. Million+ (2013) *What's the value of a UK degree?*

CHAPTER 5:

TRENDS IN INCOME AND EXPENDITURE FOR HIGHER EDUCATION INSTITUTIONS

5.1 Scope of this chapter and availability of data

This chapter examines the implications of changes outlined in chapters 2 to 4 for UK and EU undergraduate students, UK and EU postgraduate students and non-EU students on income and expenditure, with a focus on higher education institutions in England. It examines outcomes leading up to 2012–13, and looks forward to implications beyond 2012–13 for higher education institutions in England and the wider UK economy.

Data on income and expenditure relating to 2012–13 will not become available until the first quarter of 2014. Therefore this chapter explores recent trends in income and expenditure up until 2011–12, and uses forecast information for 2012–13 and beyond.

5.2 Trends in income and expenditure in the run-up to 2012–13

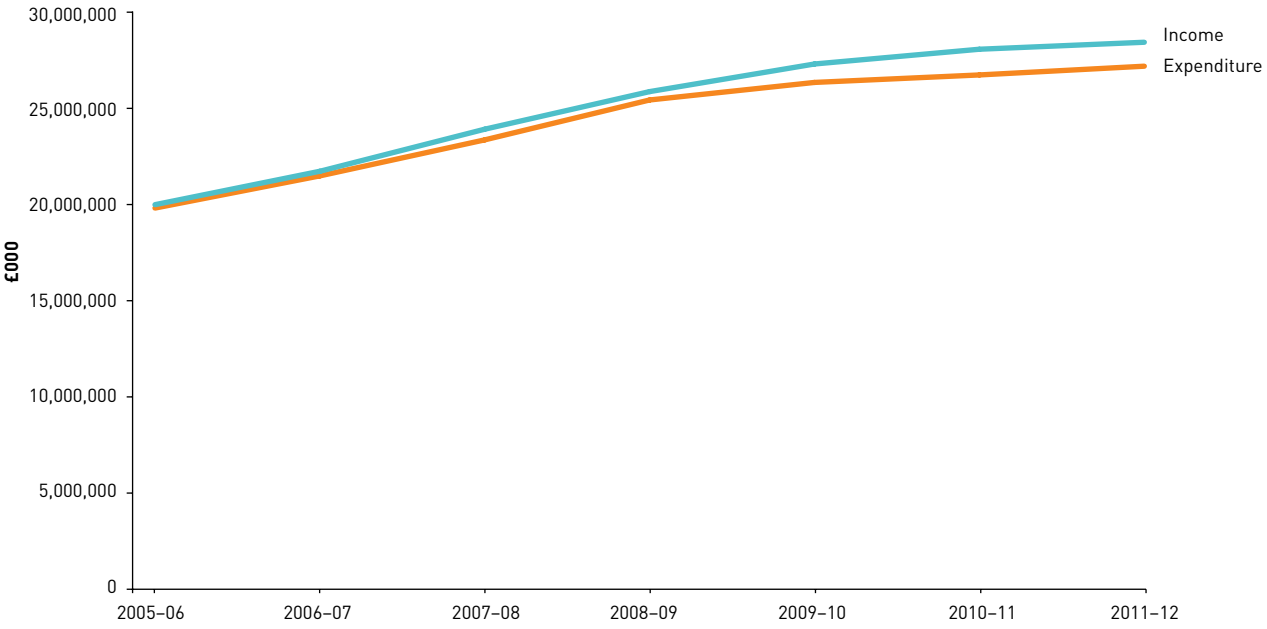
Over the past decade there has been a relatively steady rise in the level of income to the UK's higher education sector, an increase of 43% since 2005–06. Over the same period the level of expenditure has also risen but at a slower rate than income, 38% over the past seven years (Figure 5.1). Surpluses (measured by the difference between net income and expenditure) increased from 2008–09 to 2011–12, possibly due to increased income diversification and efforts by institutions to reduce costs (Figure 5.2).

The number of UK higher education institutions reporting a surplus or breakeven was 147 out of 164 in 2011–12 compared with 151 out of 165 in 2010–11 and 142 out of 166 in 2009–10. Deficits were reported by 17 institutions in the financial year 2011–12, by 14 institutions in 2010–11 and by 24 institutions in 2009–10 (Figure 5.3).

Some credit rating agencies, including Moody's and Standard & Poor's, have published assessments of institutions in England. A report published by Moody's in 2012 concluded that the sector enters the period of reforms 'from a sound financial position, as many schools have restructured their cost bases and accumulated healthy reserves.'[47] Standard & Poor's have noted that 'the generation of relatively modest surpluses is an important indicator of a university's ability to meet its operating obligations, to attract external capital and service debt, to withstand unexpected shocks, and to invest adequately in its physical infrastructure.'[48]

An increase in surpluses may reflect strategies by some institutions to build a buffer to prepare themselves for increased financial uncertainty, particularly around future income from public funding, and to independently pursue their longer-term plans for capital investment. Between 2009–10 and 2010–11, while the level of capital expenditure by English institutions stayed about the same, the amount funded by institutions' own internal cash resources increased four-fold.

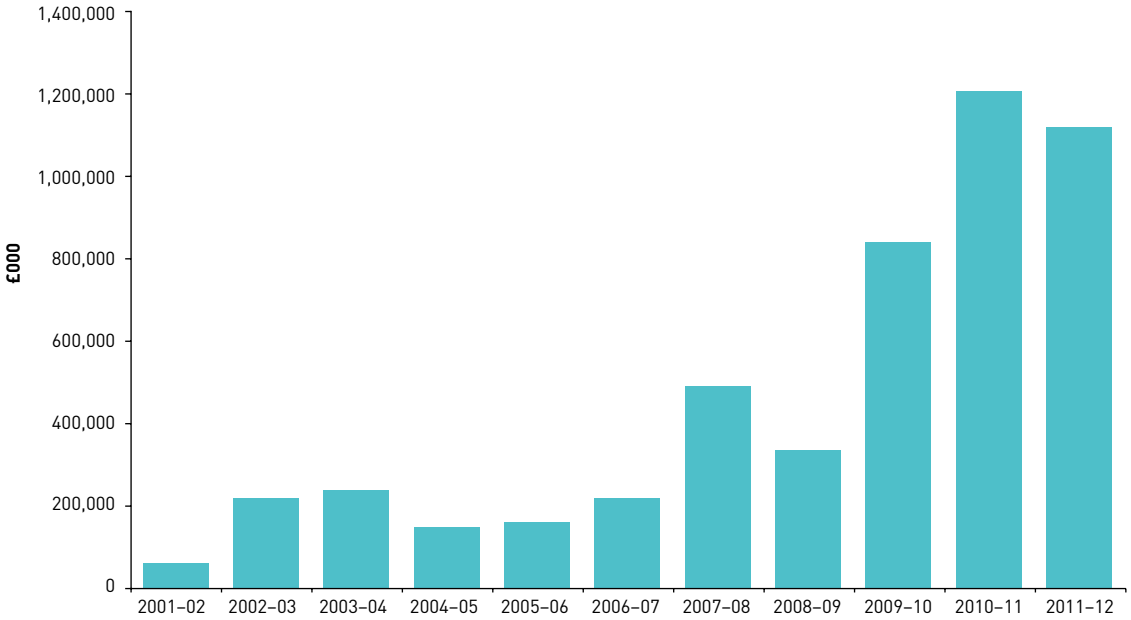
Figure 5.1: Trends in total income and total expenditure for UK institutions, 2005–06 to 2011–12



Source: HESA

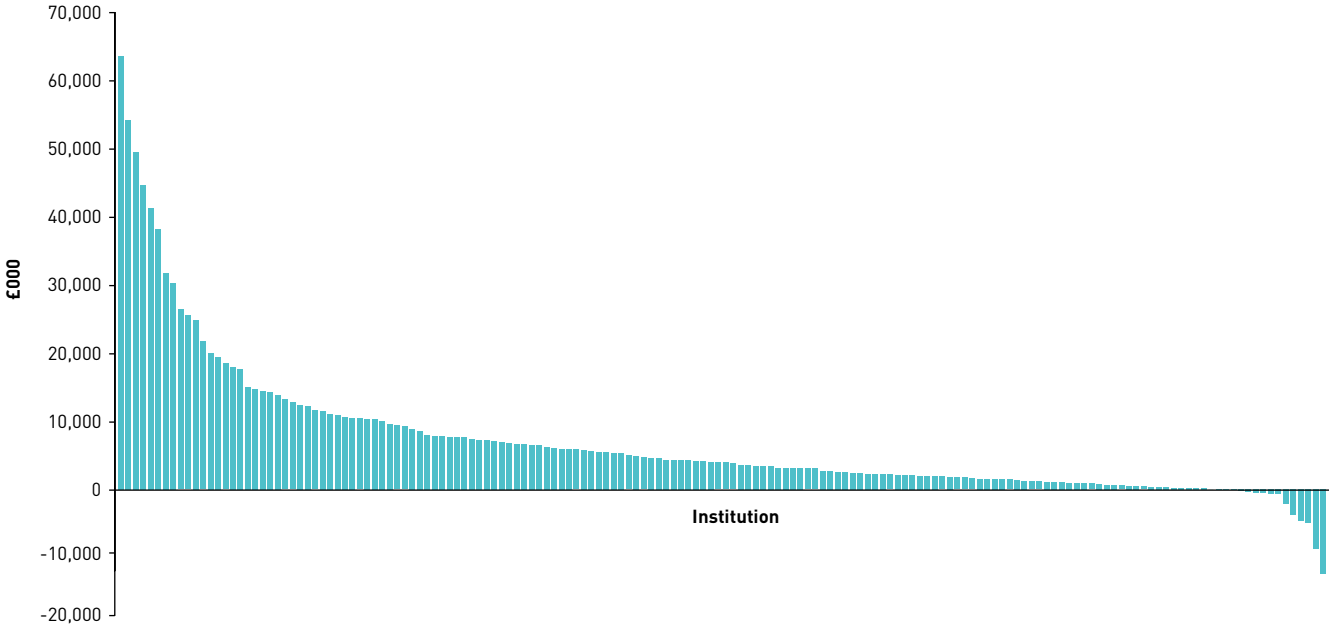
47. Moody's (2012) *English Universities: Reform Likely to be Credit Neutral for Most Schools*
48. Standard & Poor's (2012) *International Public Finance: Approaches To Rating U.K. Universities Amid Growing Credit Diversity*

Figure 5.2: Surplus/(deficit) of net income over expenditure for UK institutions, 2001–02 to 2011–12



Source: HESA

Figure 5.3: Surplus/(deficit) for individual UK institutions 2011–12

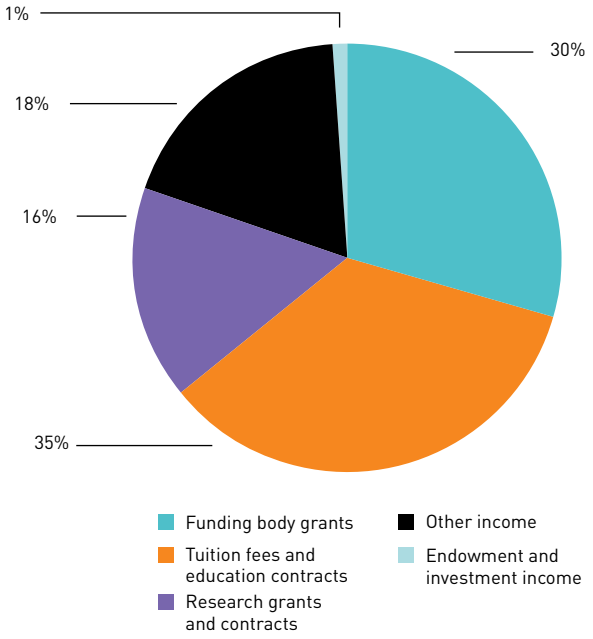


Source: HESA

5.2.1 Trends in income for institutions in England

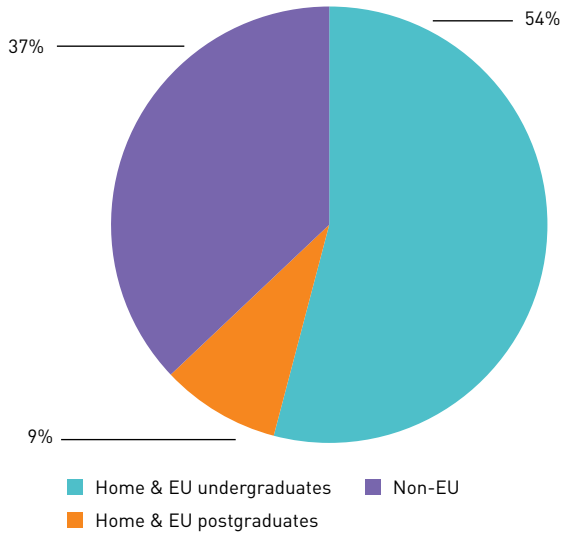
University income streams are diverse in the range of sources from which they are drawn, and the degree of diversification away from core public funding has increased over the last decade. In 2000–01, 40% of income to institutions in England came from core grant funding, falling to 30% in 2011–12. Figure 5.4 shows the range of sources of income to institutions in England in 2011–12. In 2011–12, over one-third of total income was made up of tuition fee income, and tuition fee income has almost trebled since 2000–01. This is largely as a result of increased fee income from overseas students and additional income from variable fees in England since their introduction in 2006–07. Figure 5.5 shows the composition of course fee income in 2011–12.

Figure 5.4: Income to higher education institutions in England by source, 2011–12



Source: HESA

Figure 5.5: HE course fee income to higher education institutions in England by source, 2011–12



Source: HESA

Income from sources outside the public sector has become increasingly important to institutions over the past six years. Table 5.1 shows elements of income included in the 'research grants and contracts' and 'other income' categories shown in Figure 5.4. While income from industry has grown more slowly than income from charities for research, income from intellectual property has nearly doubled.

Non-research-related income from industry to institutions has increased by nearly 50% in the last six years. This includes all income relating to the supply of goods and consultancy. In addition, institutions have experienced an increase in income from their residences, catering and conference operations of over 40% in the past six years.

Table 5.1: External income to higher education institutions in England, 2005–06 to 2011–12

Income source	2005–06 £000	2011–12 £000	% change between 2005–06 and 2011–12
Income from research contracts			
- from UK industry	208,350	230,147	10%
- from UK charities	610,117	779,666	28%
Income from intellectual property	24,325	47,055	93%
Non research income from industry	680,690	996,703	46%
Income from residences and conferences	973,136	1,385,492	42%

Source: HESA

Philanthropic giving has also increased in importance as a source of income to institutions. At the end of financial year 2006–07, 131 UK institutions reported £513 million in total funds raised from 132,000 donors. Five years later, 152 institutions reported £693 million from more than 204,000 donors. This is equivalent to a 35% increase in funds raised and 54% more donors.[49]

5.2.2 Trends in expenditure for institutions in England

Figure 5.6 shows that the sector's main item of expenditure is staff costs. There has been significant pay restraint in the university 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. Annual trade union pay claims during this period have ranged between 5.4% and 8%.

Other operating expenses include expenditure on equipment that has not been capitalised, and maintenance costs. The sector is implementing a number of long-term initiatives that will enhance operational efficiency, with gains already starting to be realised. These initiatives have significant potential to drive down this component of expenditure in the future.

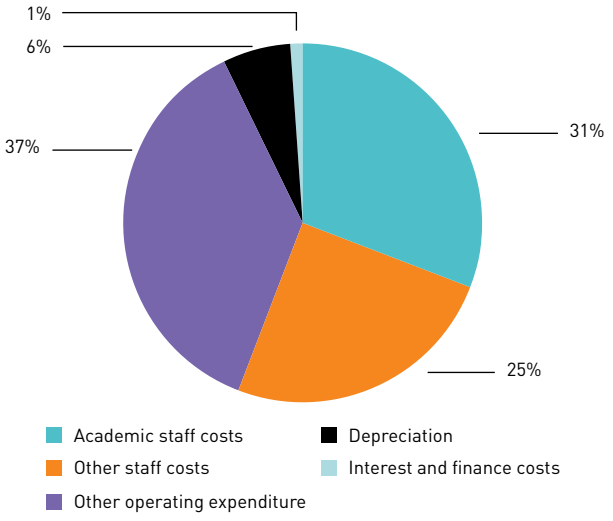
5.3 Changes in 2012–13 and the outlook up to 2014–15

Changes to the funding of UK and EU undergraduate provision will lead to a vast change in the composition of funding to institutions away from core grants and towards greater tuition fee income between 2011–12 and 2014–15. In financial year 2011–12 the HEFCE teaching grant of £4.6 billion accounted for 64.1% of teaching funding to institutions in England. This is expected to decrease to just over £2 billion (in cash terms) in financial year 2014–15, accounting for only 24.7% of teaching funding in that year (Figure 5.7).

HEFCE forecasts[50] of total income to institutions predict a rise in total income of 2.8% in cash terms in 2012–13, with further rises up until 2014–15 (Figure 5.8). In 2012–13 tuition fee income is expected to account for 42% of total income (compared with 34% in 2010–11), and funding body grants 23% of total income (compared with 31% in 2010–11). However, these forecasts are heavily dependent on institutions achieving their recruitment targets over this period. Any deviation from recruitment targets, arising from increased volatility in recruitment patterns, has the potential to impact on the financial sustainability of institutions in the short to medium term.

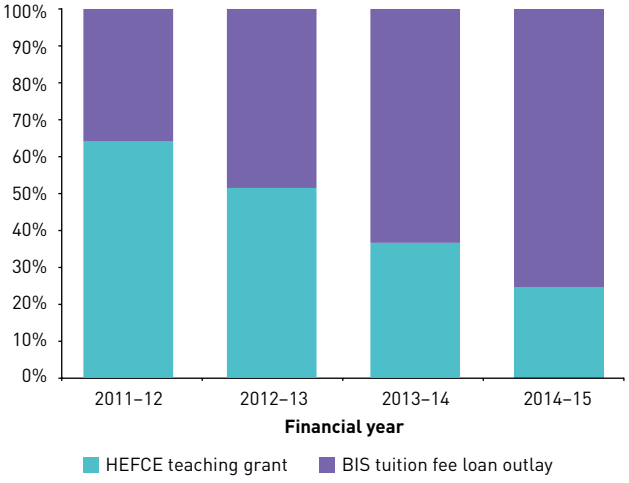
There are indications that many institutions did not meet their recruitment targets in 2012–13. Earlier forecasts made by institutions for changes in

Figure 5.6: Expenditure of higher education institutions in England by category, 2011–12



Source: HESA

Figure 5.7: Indicative balance of teaching funding between HEFCE teaching grant and tuition fee loan outlay to higher education institutions to 2014–15



Source: BIS and HESA

49. Report to HEFCE by More Partnership (2012) *Review of philanthropy in UK higher education*
50. HEFCE (2012) *Financial health of the higher education sector*

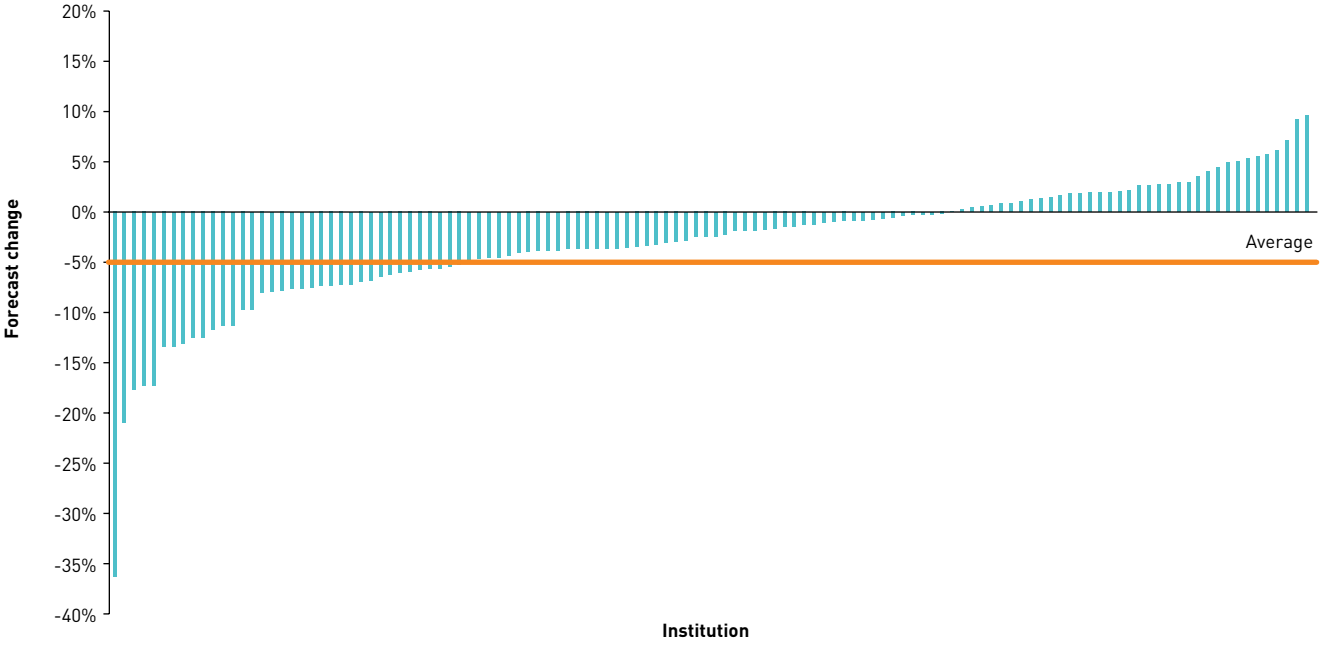
home and EU undergraduate numbers for 2012–13 predicted an average reduction of 2.1%, but recent forecasts have been revised downwards, with an average reduction of 5% (Figure 5.9). In addition, the situation has not yet stabilised to an extent which enables firm projections to be made about increases in income in 2013–14 and 2014–15.

Revenue from non-EU student tuition fees presents an additional source of uncertainty in relation to HEFCE's forecasts for an increase in income in 2012–13 and further increases to 2014–15. HEFCE's forecasts are based on the sector's expectation that non-EU fee income will rise in real terms by an average of 24.5% between 2011–12 and 2014–15. However, recent revisions to the forecasts show the sector is now only predicting a rise of 6.8% in non-EU fee income, compared with a rise of 9.9% previously forecast. The reforms to immigration may affect the sector's ability to achieve increases in non-EU fee income, with the implication of greater downside risk to the forecasts for total income for 2012–13 to 2014–15.

Figure 5.8: Total income to the higher education sector (England only), including forecast income 2012–13 to 2014–15

Source: HESA and HEFCE

Figure 5.9: Forecast changes in home and EU undergraduate student numbers between 2011–12 and 2012–13



Source: HEFCE

The downside risk to forecasts for total income has implications for institutional planning up to 2014–15. Surpluses are projected to fall from 4.2% of income in 2011–12 to 1.6% of income in 2012–13, before rising to around 3.4% in 2014–15. However, institutions are reporting strategies to aim for a range of between 1% and 6% in surpluses to act as a buffer for unexpected outcomes arising from uncertainty in student recruitment, both nationally and internationally.

5.4 Funding of capital investment

Surpluses are also becoming an increasingly important part of institutions' strategies to finance capital investment. Many institutions are reporting changes in their strategies to fund capital investment in response to government announcements in the Spending Review in 2010 of a substantial reduction in capital grants up to 2014–15. Figure 5.10 shows the substantial drop in capital grants from 2009–10.

In interviews carried out by Universities UK with a sample of vice-chancellors, a number of strands to strategies for funding capital investment were reported. Main sources of funding included:

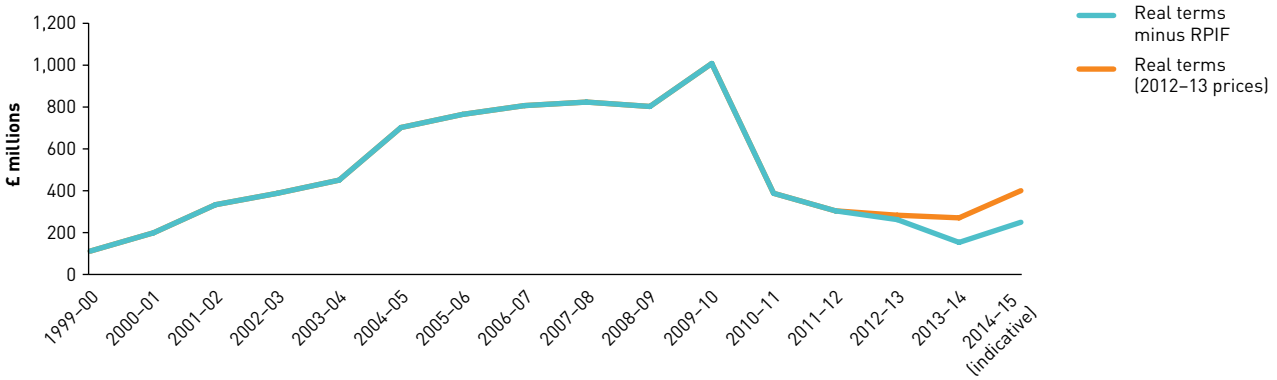
- generating a margin between income and expenditure to be allocated for capital expenditure, for both teaching capital and research capital
- increased borrowing from banks
- alternatives to borrowing, including bond issuances and PFI-style partnerships
- generating sufficient operating cash inflows to finance the capital investment itself and also increased debt servicing costs arising from increased borrowing

These funding sources were interrelated. For example, demonstrating the ability to generate a margin between income and expenditure, and projections for this to continue, was important for institutions to be able to secure additional borrowing from banks, and to allow for increases in debt servicing when borrowing was secured.

The switch from funding capital expenditure with capital grants to funding from internal cash sources is shown in Figure 5.11. The sector projects a much higher level of cash from internal sources to finance capital expenditure from 2012–13 to 2014–15 than was previously the case in 2009–10. While in 2009–10 around 11% of capital expenditure was financed from internal cash, this is projected to rise to around 73% by 2014–15.

Some institutions have reported limitations to borrowing from banks to finance capital investment. Some report that banks are unwilling to lend over the longer term needed for very large capital investments. A number also report that interest rates can be high, leading to large projected increases in debt servicing costs. Some institutions have higher levels of gearing than others, and therefore increased borrowing is not uniformly available to all institutions to fund increased capital expenditure. Figure 5.12 shows that institutions vary a great deal in terms of the extent to which they take on long-term borrowing, with ratios ranging from zero up to nearly 165% of total income.

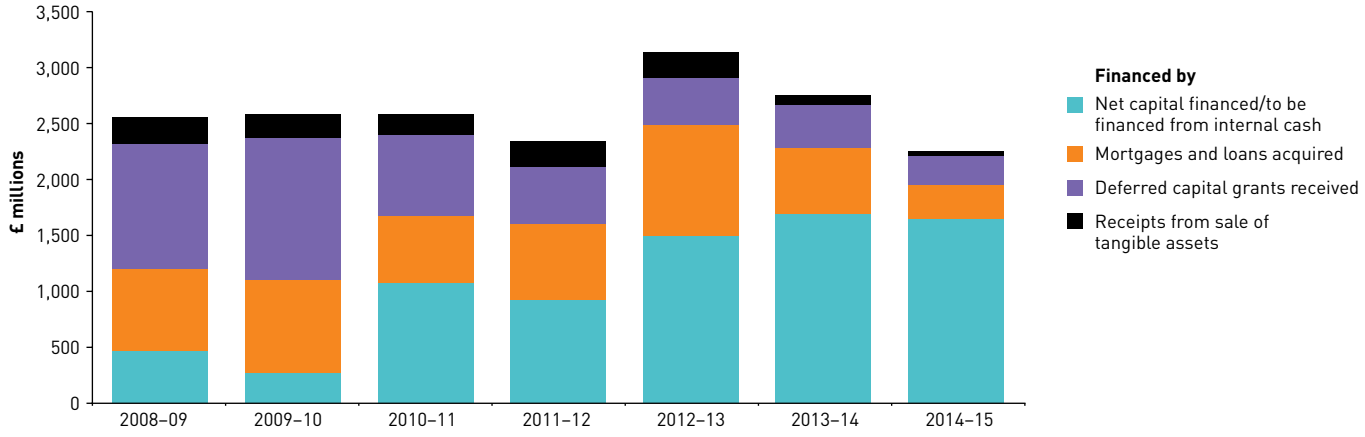
Figure 5.10: HEFCE capital funding, 1999–2015, in real terms (2012–13 prices)



RPIF: Research Partnership Investment Fund

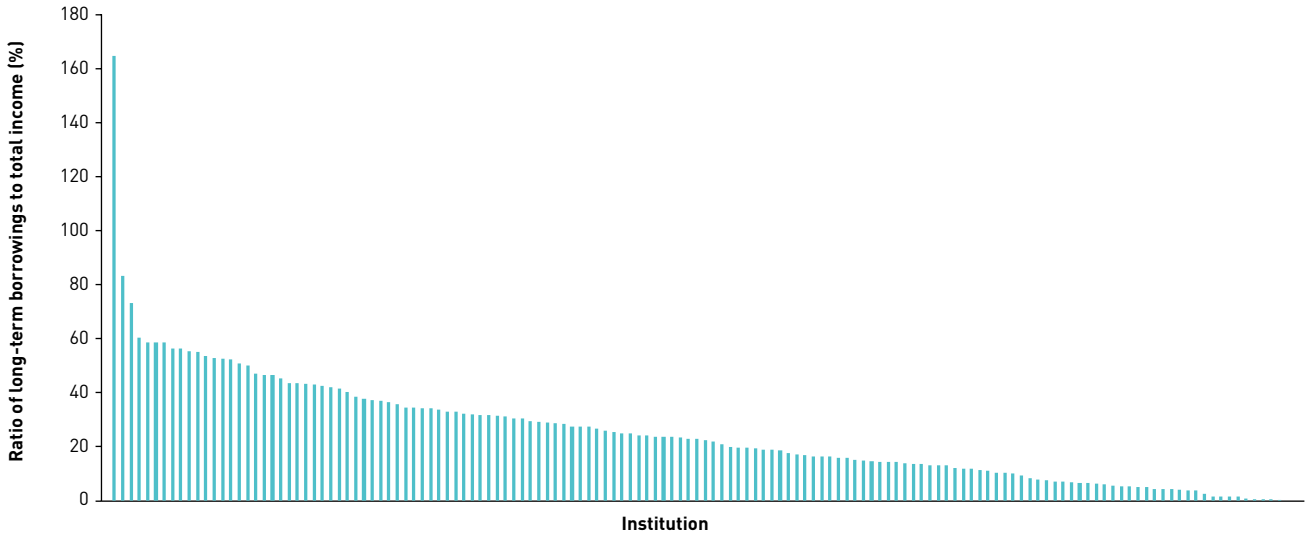
Source: HEFCE

Figure 5.11: Funding breakdown of capital expenditure 2008-09 to 2014–15



Source: HEFCE

Figure 5.12: Ratio of long-term borrowing to total income for individual institutions in the UK, 2011–12



Source: HESA

Total borrowing by the sector is reflected in HEFCE's forecasts, which show borrowings are expected to rise to £6,409 million by the end of 2014–15, a high of 24.6% of total income. This compares with borrowing fluctuating between 18.4% and 21.9% from 2001 to 2010. However, more recent forecasts for 2012–13 show that the sector is already forecasting borrowing to rise to 25.8%, up from previous forecasts of 24.4%. If an institution's access to borrowing is limited, then the main avenue by which capital expenditure can be financed is through generating a margin for investment through an excess of income over expenditure.

Therefore, forecasts for the generation of surpluses by the sector up to 2014–15 should be interpreted as part of a wider strategy by institutions to fund capital investment, with the following aspects:

- Forecasts for a margin between income and expenditure are necessary (though not sufficient) for institutions to access additional borrowing and external sources of funding.
- The margin between income and expenditure (and also net cashflows) will be diminished for an institution once it takes on additional borrowing to invest, due to increased debt servicing costs. Therefore, forecasts for the margin are fluid and dependent on the point at which an institution decides to take on additional debt.

- For institutions that are constrained in the amount of additional borrowing they can take on, generating a margin between income and expenditure (and the related cash inflows) is the only viable avenue by which capital investment can be funded. For these institutions, generating sustained margins for investment will be key to maintaining and investing in their capital infrastructure. Some institutions report that a surplus of 7% of total income or more is required to maintain the existing estate, whereas surpluses of around 10% are required for major growth or new areas of investment. In the private sector, some firms report targets of 10% or more in order to fund capital investment and to act as a buffer for uncertainty.

Maintenance of capital infrastructure will also be a key draw on margins between income and expenditure for institutions. It is very difficult for institutions to fund maintenance through borrowing or external sources of investment, as it is less clear to investors what the benefits may be. Therefore, margins between income and expenditure will be the only real way to fund maintenance over the medium term.

If total income outturns are much lower than forecast, due to lower than anticipated student recruitment from domestic and non-EU sources, this has significant implications for the sector's ability to maintain and improve the quality of its teaching and research infrastructure. Standard & Poor's has noted that the maintenance of physical infrastructure is already a major challenge for many institutions.

5.5 Implications for the UK's international competitiveness and the long-term sustainability of the higher education sector

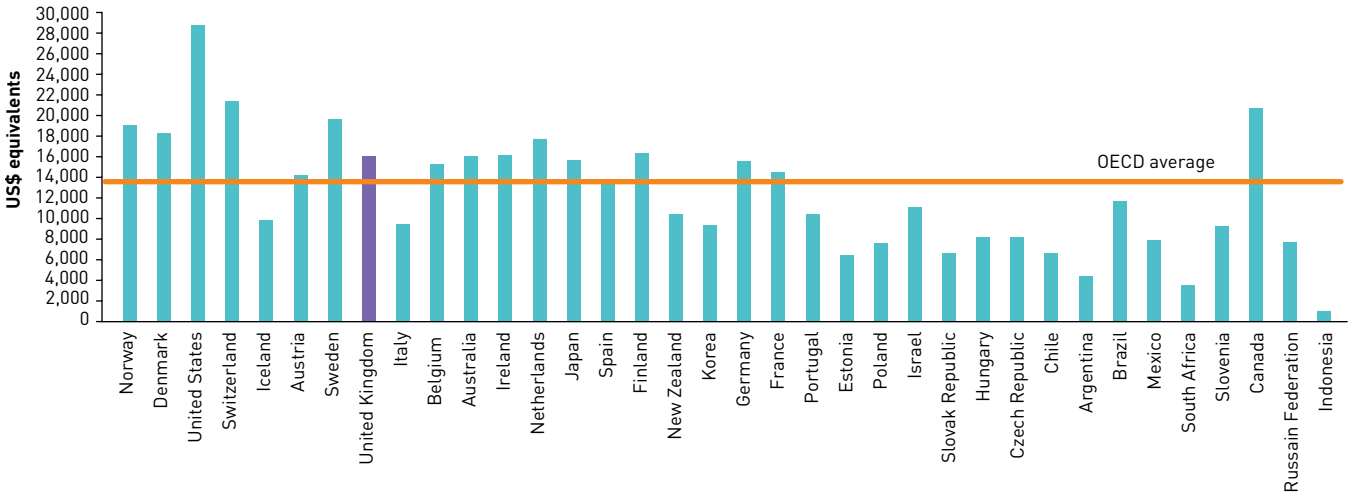
Changes to income and expenditure for institutions in the UK over the past decade have taken place against a backdrop of global changes in investment in higher education and expansion of provision. The OECD reports on annual expenditure per student by institutions as an indicator of the balance between improving the quality of educational services and expanding enrolments. The amount of expenditure per student provides a measure of the unit costs of higher education.

Figure 5.13 shows that the UK is above the OECD average in terms of amount spent per student. However, the US spends over $29,000 per student, nearly double the UK's spending of around $16,000. The UK also spends considerably less than Canada, Switzerland, Sweden and the Netherlands.

The UK's position in relation to the OECD average on expenditure per student has been driven by a strong increase in expenditure from 2000 to 2009, with its real expenditure nearly doubling. In comparison, the US has experienced recent falls in expenditure per student. Countries that have significantly increased expenditure per student include South Korea, Estonia, Spain and Portugal.

International comparisons show that the UK is relatively strongly placed in terms of providing a high quality experience for students, when measured by expenditure per student. However, the downside risk to forecasts for the future trajectory of income to

Figure 5.13: Annual expenditure per student by higher education institutions, 2009



In US dollar equivalents, based on full-time equivalents

Source: OECD

institutions in England could affect the UK's ability to maintain this position. Section 5.3 of this report showed that there is significant downside risk to HEFCE's forecasts that total income will rise from 2011–12 to 2014–15.

In addition, there are significant financial pressures on the sector in the medium term, including the following:

- Many institutions have charged fees at the £9,000 cap, and are therefore now at the limits of their pricing strategy in relation to UK and EU undergraduate students. These institutions must increase their number of students to increase revenues. Some may need to invest in additional capital, at a time of constrained funding for capital, in order to have sufficient capacity to expand numbers in the future.

- While institutions have been resilient in building surpluses and have used them to fund capital expenditure, there is significant doubt that this is sufficient to compensate for the significant cuts to capital grants, with implications for the long-term sustainability of the UK's teaching and research capital infrastructure. Failure to invest in maintaining and enhancing capital could mean a return to the period of historical underinvestment in capital, which had only been partially rectified prior to the 2010 Spending Review. It would mean a significant step back for the sector and would be detrimental to the UK's ability to provide a world-class teaching and research environment.

- The sector has made good progress in recent years in improving operational efficiency. The sector collectively delivered efficiencies of around £481 million in in 2011–12 on top of the funding cuts imposed in 2010. However, the benefits of longer-term initiatives, which have required up-front investment, around sharing of best practice and benchmarking, procurement, and asset utilisation will take some time to translate into cashable savings.

The downside risks to income forecasts up to 2014–15 and the financial pressures outlined here may have an impact on the financial sustainability of higher education institutions in the medium term. This has longer-term implications for the UK's skilled workforce, productivity, and economic growth. A financially sustainable higher education system is crucial to maintaining the supply of undergraduates and postgraduates to the UK's economy, and equipping it with the knowledge to enable growth and to ensure resilience to future economic shocks.

Definitions

Applicants = those applying for full-time undergraduate study through UCAS from the UK, EU or non-EU countries

Acceptances = those full-time undergraduate UCAS applicants who have accepted an offer from a UK higher education institution

Application rate = number of applicants divided by the estimated base population

Acceptance rate = number of acceptances divided by number of applicants, multiplied by 100

Cycle = UCAS uses the word 'cycle' to refer to the application cycle, in order to distinguish it from the entry year (eg application cycle 2012, as opposed to academic entry year 2012–13), which is important when comparing applicants in 2012 with entrances in 2012–13, due to deferred acceptances

Deferred acceptances = acceptances who have applied in a particular cycle (eg 2012) but defer entry to the following academic year (eg 2013–14)

Entry rate = proportion of the population accepted into higher education

Entry year = the year in which a student enters university (the student could have applied a year earlier and deferred entry to that academic year)

Estimated base population = for 16- to 20-year-olds, the ONS Mid-Year Estimates and National Population Projections for 15-year-olds are used from the appropriate number of years earlier (eg for 18-year-olds, the figures from three years earlier would be used and then aged). This approach eliminates changes due to net migration, such as overseas students. Ages of 21 and above are taken from the Mid-Year Estimates and National Population Projections without ageing.

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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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