

Update to data analysis of unconditional offers

Annexes

To be read in conjunction with OfS 2022.20

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Annex A: Number and proportion of UCAS placed applicants entering higher education

- 1. Table A1 shows the number of students placed through different routes who were identified in the higher education student records. The table is split into the three broad UCAS routes into higher education: those placed through conditional offers, unconditional offers, and 'other UCAS routes' for applicants to the main scheme (i.e. excluding those placed through a Record of Prior Acceptance (RPA) or Direct Clearing). Definitions of these entry routes can be found in Annex C. It should be noted that:
 - a. There are more opportunities to find applicants placed in earlier years in later years of the data.
 - b. All tracking methods are dependent on the quality of the personal data used for matching, and therefore some of those not identified in higher education could be unmatched for data quality reasons.
 - c. Those shown as not placed in UCAS, but found in higher education in the same year, could have been placed at higher education providers not recruited through the UCAS undergraduate scheme, such as conservatoires.
 - d. Those applying for deferred entry are not included in the table.

Table A1: Number of English 18-year-old UCAS applicants entering OfS-registered higher education providers, 2015 to 2019

Entry route	Identified in HE	Number of applicants in 2015	Number of applicants in 2016	Number of applicants in 2017	Number of applicants in 2018	Number of applicants in 2019
Conditional offer route	At same provider in same year	134,175	129,895	122,665	111,130	109,270
Conditional offer route	At same provider in later year	380	335	295	240	170
Conditional offer route	At different provider in same year	480	505	460	645	620
Conditional offer route	At different provider in later year	915	880	740	610	395
Conditional offer route	Entered in earlier year	0	5	0	0	0
Conditional offer route	Not identified in higher education	1,555	1,655	1,600	1,525	1,340
Unconditional offer route	At same provider in same year	12,295	16,840	24,430	33,605	36,035
Unconditional offer route	At same provider in later year	20	45	50	90	75
Unconditional offer route	At different provider in same year	30	50	55	230	175
Unconditional offer route	At different provider in later year	90	130	130	175	150
Unconditional offer route	Entered in earlier year	0	0	5	0	10
Unconditional offer route	Not identified in higher education	170	270	355	540	565
Other UCAS route	At same provider in same year	22,885	23,740	24,935	24,935	28,180
Other UCAS route	At same provider in later year	115	115	90	95	85
Other UCAS route	At different provider in same year	895	880	805	725	730
Other UCAS route	At different provider in later year	225	280	210	195	170
Other UCAS route	Entered in earlier year	0	0	0	0	0
Other UCAS route	Not identified in higher education	230	250	225	235	285
In UCAS, not placed	At different provider in same year	2,465	2,530	2,700	2,805	3,055
Total	Total	176,920	178,410	179,750	177,780	181,305

Annex B: Continuation rates and number of entrants

- 1. Table B1a shows the number of entrants in 2019-20, and the proportion who continued into their second year of study (continuation rate) for different entry grade profiles predicted at the time of application. Table B1b shows the same information for entrants in 2018-19.
- 2. The table is split into the three broad UCAS routes into higher education for applicants to the main scheme (i.e. excluding those placed through a Record of Prior Acceptance (RPA) or Direct Clearing). Definitions of these entry routes can be found in Annex C:
 - a. those placed through conditional offers
 - b. those placed through unconditional offers
 - c. and those placed through 'other UCAS routes'.
- 3. Equivalent versions of Table B1 for entrants in 2015-16, 2016-17 and 2017-18 can be found in the datafile associated with this report.
- 4. Continuation rates are not shown where the corresponding number of entrants is less than 100.

Table B1a: Number of 2019-20 entrants and their continuation rates by entry route, and predicted entry grades

Predicted entry grades	Number placed through conditional offers	Number placed through unconditional offers	Number placed through other UCAS route	Total number of entrants	Continuation rate of entrants placed through conditional offers	Continuation rate of entrants placed through unconditional offers	Continuation rate of entrants placed through other UCAS routes	Continuation rate of all entrants
A-level: A*A*A*	8,600	390	550	9,540	99.0%	98.2%	99.1%	98.9%
A-level: A*A*A	7,245	755	1,065	9,065	98.7%	98.7%	97.6%	98.6%

¹ Data file available at <u>www.officeforstudents.org.uk/publications/update-to-data-analysis-of-unconditional-offers/.</u>

Predicted entry grades	Number placed through conditional offers	Number placed through unconditional offers	Number placed through other UCAS route	Total number of entrants	Continuation rate of entrants placed through conditional offers	Continuation rate of entrants placed through unconditional offers	Continuation rate of entrants placed through other UCAS routes	Continuation rate of all entrants
A-level: A*AA	8,985	1,650	2,240	12,875	98.6%	97.8%	98.2%	98.4%
A-level: AAA	10,930	2,865	3,410	17,205	98.4%	97.5%	97.3%	98.0%
A-level: AAB	9,765	2,975	3,560	16,295	97.8%	96.9%	97.3%	97.5%
A-level: ABB	8,440	3,810	3,230	15,480	97.1%	96.1%	96.8%	96.8%
A-level: BBB	7,155	3,805	2,615	13,575	96.8%	95.5%	95.5%	96.2%
A-level: BBC	5,110	2,430	1,655	9,195	96.0%	95.7%	94.8%	95.7%
A-level: BCC	3,340	1,315	1,145	5,795	94.7%	93.5%	94.6%	94.4%
A-level: CCC and below	3,630	885	1,400	5,915	94.4%	93.8%	92.8%	93.9%
BTEC: D*D*D*	2,200	1,005	235	3,440	91.8%	90.8%	92.4%	91.5%
BTEC: D*D*D	1,025	500	125	1,650	92.8%	91.6%	91.3%	92.3%
BTEC: D*DD	1,125	550	180	1,855	92.1%	90.6%	89.0%	91.3%
BTEC: DDD	1,600	910	330	2,845	89.9%	89.6%	87.0%	89.5%
BTEC: DDM	1,115	740	225	2,075	89.2%	87.7%	82.1%	87.9%
BTEC: DMM	935	470	205	1,610	89.5%	87.7%	88.2%	88.8%
BTEC: MMM and below	1,055	185	250	1,490	86.5%	87.6%	84.0%	86.2%
2 A-levels, 1+ BTEC	4,165	2,250	975	7,390	94.9%	94.7%	93.6%	94.7%
2 A-levels or fewer	11,275	4,465	2,570	18,315	94.4%	93.5%	92.1%	93.8%

Predicted entry grades	Number placed through conditional offers	Number placed through unconditional offers	Number placed through other UCAS route	Total number of entrants	Continuation rate of entrants placed through conditional offers	Continuation rate of entrants placed through unconditional offers	Continuation rate of entrants placed through other UCAS routes	Continuation rate of all entrants
BTECs of size 2 grades or fewer	2,945	1,155	645	4,745	90.3%	89.4%	85.1%	89.4%
Other	8,185	2,680	1,435	12,295	91.5%	91.0%	87.5%	90.9%
Total	108,820	35,790	28,040	172,650	95.9%	94.4%	94.8%	95.4%

Table B1b: Number of 2018-19 entrants and their continuation rates by entry route, and predicted entry grades

Predicted entry grades	Number placed through conditional offers	Number placed through unconditional offers	Number placed through other UCAS route	Total number of entrants	Continuation rate of entrants placed through conditional offers	Continuation rate of entrants placed through unconditional offers	Continuation rate of entrants placed through other UCAS routes	Continuation rate of all entrants
A-level: A*A*A*	7,805	305	395	8,505	98.7%	99.0%	97.7%	98.7%
A-level: A*A*A	6,850	680	795	8,325	98.4%	97.9%	97.5%	98.2%
A-level: A*AA	8,650	1,485	1,695	11,830	98.1%	97.6%	97.0%	97.9%
A-level: AAA	11,515	2,685	2,840	17,045	97.8%	97.2%	96.8%	97.5%
A-level: AAB	10,820	2,730	3,245	16,795	97.5%	96.6%	97.2%	97.3%
A-level: ABB	9,200	3,730	3,045	15,970	96.5%	96.4%	96.0%	96.4%
A-level: BBB	7,985	3,670	2,505	14,160	96.1%	95.1%	94.8%	95.6%
A-level: BBC	5,770	2,765	1,535	10,075	95.3%	94.4%	94.7%	94.9%

Predicted entry grades	Number placed through conditional offers	Number placed through unconditional offers	Number placed through other UCAS route	Total number of entrants	Continuation rate of entrants placed through conditional offers	Continuation rate of entrants placed through unconditional offers	Continuation rate of entrants placed through other UCAS routes	Continuation rate of all entrants
A-level: BCC	4,030	1,365	1,090	6,485	94.7%	94.1%	94.1%	94.5%
A-level: CCC and below	4,150	875	1,235	6,255	93.9%	93.2%	92.3%	93.5%
BTEC: D*D*D*	2,475	1,075	230	3,775	89.1%	89.8%	85.7%	89.1%
BTEC: D*D*D	1,090	490	130	1,710	87.6%	91.0%	84.1%	88.3%
BTEC: D*DD	1,070	500	160	1,730	86.2%	90.6%	84.4%	87.3%
BTEC: DDD	1,655	875	290	2,820	87.6%	88.9%	82.2%	87.5%
BTEC: DDM	1,190	720	225	2,140	88.8%	85.3%	81.1%	86.8%
BTEC: DMM	1,085	450	200	1,735	84.4%	83.4%	87.1%	84.5%
BTEC: MMM and below	1,120	155	260	1,535	85.2%	80.8%	77.5%	83.5%
2 A-levels, 1+ BTEC	3,985	1,925	805	6,715	93.4%	92.6%	92.4%	93.0%
2 A-levels or fewer	10,360	3,825	2,265	16,450	93.2%	91.5%	90.3%	92.4%
BTECs of size 2 grades or fewer	2,655	1,010	560	4,225	87.5%	89.1%	85.9%	87.7%
Other	7,230	2,090	1,280	10,600	89.8%	88.9%	88.7%	89.5%
Total	110,690	33,410	24,795	168,895	95.0%	93.6%	93.9%	94.6%

^{5.} Table B2a shows the number of 2019-20 entrants with predicted A-level qualifications, and Table B2b the proportion who continued into their second year of study (continuation rate) for different entry qualification profiles predicted at the time of application. Tables B2c and B2d shows the same information for entrants in 2018-19.

- 6. The table is split by the same entry routes as Table B1, with the addition of detailed unconditional offer routes.
- 7. RPA and Direct Clearing applicants are not included.
- 8. Equivalent versions of Table B2 for entrants in 2015-16, 2016-17 and 2017-18 can be found in the datafile associated with this report.²
- 9. Continuation rates are supressed where the corresponding number of entrants is less than 100.

Table B2a Number of 2019-20 A-level entrants by offer route, and predicted entry grades

Predicted entry grades	Number placed through conditional offers	Number placed through conditional unconditional offers	Number placed through direct unconditional offers	Number placed through other unconditional offers	Number placed through other UCAS route	Total number of A-level entrants
A-level: A*A*A*	8,600	330	15	45	550	9,540
A-level: A*A*A	7,245	595	20	135	1,065	9,065
A-level: A*AA	8,985	1,210	75	365	2,240	12,875
A-level: AAA	10,930	1,730	290	845	3,410	17,205
A-level: AAB	9,765	1,490	485	1,000	3,560	16,295
A-level: ABB	8,440	1,805	700	1,300	3,230	15,480
A-level: BBB	7,155	1,680	840	1,285	2,615	13,575
A-level: BBC	5,110	1,020	475	935	1,655	9,195
A-level: BCC	3,340	445	255	615	1,145	5,795
A-level: CCC and below	3,630	265	170	450	1,400	5,915
2 A-levels or fewer	11,275	1,765	1,005	1,690	2,570	18,315
Total	84,470	12,345	4,335	8,670	23,435	133,255

² Data file available at <u>www.officeforstudents.org.uk/publications/update-to-data-analysis-of-unconditional-offers/.</u>

Table B2b Continuation rate of 2019-20 A-level entrants by offer route, and predicted entry grades

Predicted entry grades	Continuation rate of A-level entrants placed through conditional offers	Continuation rate of A-level entrants placed through conditional unconditional offers	Continuation rate of A-level entrants placed through direct unconditional offers	Continuation rate of A-level entrants placed through other unconditional offers	Continuation rate of A-level entrants placed through other UCAS routes	Continuation rate for all A- level entrants
A-level: A*A*A*	99.0%	98.5%	N/A	N/A	99.1%	98.9%
A-level: A*A*A	98.7%	98.5%	N/A	99.3%	97.6%	98.6%
A-level: A*AA	98.6%	98.2%	N/A	96.7%	98.2%	98.4%
A-level: AAA	98.4%	97.6%	98.3%	96.8%	97.3%	98.0%
A-level: AAB	97.8%	97.5%	96.1%	96.4%	97.3%	97.5%
A-level: ABB	97.1%	96.1%	96.1%	96.2%	96.8%	96.8%
A-level: BBB	96.8%	95.7%	94.6%	95.9%	95.5%	96.2%
A-level: BBC	96.0%	96.1%	95.6%	95.3%	94.8%	95.7%
A-level: BCC	94.7%	92.3%	93.8%	94.3%	94.6%	94.4%
A-level: CCC and below	94.4%	94.3%	91.9%	94.2%	92.8%	93.9%
2 A-levels or fewer	94.4%	94.2%	91.9%	93.6%	92.1%	93.8%
Total	97.2%	96.4%	94.6%	95.5%	96.0%	96.7%

Table B2c Number of 2018-19 A-level entrants by offer route, and predicted entry grades

Predicted entry grades	Number placed through conditional offers	Number placed through conditional unconditional offers	Number placed through direct unconditional offers	Number placed through other unconditional offers	Number placed through other UCAS route	Total number of A-level entrants
A-level: A*A*A*	7,805	260	5	40	395	8,505
A-level: A*A*A	6,850	545	30	105	795	8,325
A-level: A*AA	8,650	1,120	75	295	1,695	11,830
A-level: AAA	11,515	1,540	310	835	2,840	17,045
A-level: AAB	10,820	1,250	385	1,095	3,245	16,795
A-level: ABB	9,200	1,670	535	1,520	3,045	15,970
A-level: BBB	7,985	1,365	620	1,685	2,505	14,160
A-level: BBC	5,770	815	560	1,390	1,535	10,075
A-level: BCC	4,030	160	335	870	1,090	6,485
A-level: CCC and below	4,150	120	265	490	1,235	6,255
2 A-levels or fewer	10,360	1,155	890	1,785	2,265	16,450
Total	87,140	9,995	4,010	10,110	20,640	131,895

Table B2d Continuation rate of 2018-19 A-level entrants by offer route, and predicted entry grades

Predicted entry grades	Continuation rate of A-level entrants placed through conditional offers	Continuation rate of A-level entrants placed through conditional unconditional offers	Continuation rate of A-level entrants placed through direct unconditional offers	Continuation rate of A-level entrants placed through other unconditional offers	Continuation rate of A-level entrants placed through other UCAS routes	Continuation rate for all A- level entrants
A-level: A*A*A*	98.7%	98.8%	N/A	N/A	97.7%	98.7%
A-level: A*A*A	98.4%	97.6%	N/A	99.1%	97.5%	98.2%
A-level: A*AA	98.1%	97.6%	N/A	98.3%	97.0%	97.9%
A-level: AAA	97.8%	97.4%	95.5%	97.6%	96.8%	97.5%
A-level: AAB	97.5%	96.7%	97.1%	96.2%	97.2%	97.3%
A-level: ABB	96.5%	97.0%	96.1%	95.9%	96.0%	96.4%
A-level: BBB	96.1%	94.8%	95.3%	95.4%	94.8%	95.6%
A-level: BBC	95.3%	94.8%	92.9%	94.7%	94.7%	94.9%
A-level: BCC	94.7%	91.2%	94.3%	94.5%	94.1%	94.5%
A-level: CCC and below	93.9%	93.3%	92.8%	93.5%	92.3%	93.5%
2 A-levels or fewer	93.2%	93.7%	89.3%	91.3%	90.3%	92.4%
Total	96.6%	96.2%	93.7%	94.9%	95.3%	96.1%

10. Table B3 shows the number of entrants, and OfS-registered higher education providers with entrants, placed through conditional offers, unconditional offers and 'other UCAS routes' for each entrant year from 2015-16 to 2019-20.

Table B3 Continuation rates and number of entrants and higher education providers with entrants placed through different entry routes by year

Academic year of entry	Providers with entrants placed through conditional offers	Entrants placed through conditional offers	Continuation rate of entrants placed through conditional offers	Providers with entrants placed through unconditional offers	Entrants placed through unconditional offers	Continuation rate of entrants placed through unconditional offers	Providers with entrants placed through other UCAS routes	Entrants placed through other UCAS routes	Continuation rate of entrants placed through other UCAS routes
2015-16	234	133,665	94.5%	169	12,230	93.0%	231	22,745	92.9%
2016-17	238	129,365	94.6%	178	16,750	92.9%	229	23,605	93.1%
2017-18	242	122,235	94.5%	178	24,315	93.4%	217	24,815	93.4%
2018-19	232	110,690	95.0%	172	33,410	93.6%	217	24,795	93.9%
2019-20	236	108,820	95.9%	169	35,790	94.4%	212	28,040	94.8%

- 11. The next three tables show similar information for A-level entrants placed through conditional offers, 'conditional unconditional' offers (which were chosen as Firm by the applicant), 'direct unconditional' offers, 'other unconditional' offers and 'other UCAS routes' for each entrant year from 2015-16 to 2019-20:
 - a. Table B4a shows the number of OfS-registered higher education providers with A-level entrants placed through each route.
 - b. Table B4b shows the number of A-level entrants placed through each route.
 - c. Table B4c shows the continuation rates of A-level entrants placed through each route.

Table B4a Number of OfS-registered higher education providers with A-level entrants placed through different types of offers by year

Academic year of entry	Providers with entrants placed through conditional offers	Providers with entrants placed through conditional unconditional offers	Providers with entrants placed through direct unconditional offers	Providers with entrants placed through other unconditional offers	Providers with entrants placed through other UCAS routes
2015-16	207	11	85	62	206
2016-17	215	17	94	65	198
2017-18	209	22	88	80	187
2018-19	206	27	91	81	190
2019-20	198	33	84	75	178

Table B4b Number of A-level entrants placed through different types of offers by year

Academic year of entry	Entrants placed through conditional offers	Entrants placed through conditional unconditional offers	Entrants placed through direct unconditional offers	Entrants placed through other unconditional offers	Entrants placed through other UCAS routes
2015-16	103,735	2,865	1,125	4,515	18,470
2016-17	99,855	4,275	2,545	5,100	19,360
2017-18	94,760	7,770	3,220	6,325	20,555
2018-19	87,140	9,995	4,010	10,110	20,640
2019-20	84,470	12,345	4,335	8,670	23,435

Table B4c Continuation rates of A-level entrants placed through different types of offers by year

Academic year of entry	Continuation rate of entrants placed through conditional offers	Continuation rate of entrants placed through conditional unconditional offers	Continuation rate of entrants placed through direct unconditional offers	Continuation rate of entrants placed through other unconditional offers	Continuation rate of entrants placed through other UCAS routes
2015-16	96.5%	96.9%	94.3%	95.5%	94.7%
2016-17	96.4%	96.1%	93.8%	95.2%	94.9%
2017-18	96.3%	96.2%	93.6%	94.4%	95.0%
2018-19	96.6%	96.2%	93.7%	94.9%	95.3%
2019-20	97.2%	96.4%	94.6%	95.5%	96.0%

Annex C: Definitions

Unconditional offer types

- 1. **Offer with an unconditional component** any offer that falls within one of the following categories:
 - 'Conditional unconditional' offer offers which are conditional at the point of offer and adjusted by the provider from conditional to unconditional when selected as an applicant's firm choice. These are identified in the admissions system through free text fields that providers can use to communicate any additional information to applicants. The offer conditions are analysed at the point the applicant replies to the offer or, if this is not available, 30 June.
 - 'Direct unconditional' offer offers which are unconditional at the first point of offer.
 - 'Other unconditional' offer offers which are conditional at the point of offer and become unconditional before 30 June the final date on which main scheme applications can be submitted, but which are not identified as 'conditional unconditional' from offer conditions.

Entry routes

- 2. Separate from the different types of offers received by applicants, those who applied through the main scheme of UCAS and were placed are assigned to one of three acceptance routes in this analysis:
 - Placed through conditional offer: these were placed through the UCAS firm or insurance route (first or back-up choice) and to a choice that was not identified as unconditional. Approximately 87 per cent of these are firm (first) choice. This includes those who received 'conditional unconditional' offers that they selected as an insurance choice, since these offers remained conditional on the applicant's Level 3 attainment.
 - Placed through an unconditional offer: these were placed though the UCAS firm (first choice) or insurance (back-up choice) route and to a choice that was identified as unconditional. Approximately 97 per cent of these are firm (first) choice.
 - 'Other UCAS route': These are applicants who applied in the main scheme and were then placed through a different route, including Clearing (88 per cent), Adjustment (2 per cent), Extra (7 per cent) and other main scheme routes (usually where a provider decision has not been made or the applicant has not replied to an offer by 30 June) 3 per cent.

Factors used in the modelling

 The factors included in the statistical modelling are all calculated from variables available in the UCAS application data, on the Education and Skills Funding Agency's (ESFA's) individualised learner record (ILR) or the Higher Education Statistics Authority's (HESA's) student record or student alternative record. The Index of Multiple Deprivation (IMD) 2019 quintiles are produced by the Ministry of Housing, Communities and Local Government.³

Care experience

4. Care experience describes whether a student has ever spent time in the care of a local authority in England or Wales, or Health and Social Care Trust in Northern Ireland, or who has self-declared as being in care for three months or more. The data is collected on the HESA student record only. The definition and reporting of care experience is complex. For details of the data used, see www.hesa.ac.uk/collection/c19051/a/careleaver.

Disability

Disability information is from the ILR and HESA student and student alternative records.
 Disability is self-reported by students. Details of the disability types used can be found under the IPDISABLETYPE section in OfS's 2022 Core Algorithms document.⁴

Ethnicity

6. Ethnicity is defined using IPETHNICDETAIL as described in the 2022 Core Algorithms document.

FSM status

- 7. FSM status indicates whether the student was ever recorded as being eligible to receive free school meals in the six years prior to the March census date in their final year of Key Stage 4.
- The data on free school meals status is produced by the Department for Education (DfE) as part of the National Pupil Database (NPD) and was linked onto data in the ILR and HESA student and student alternative records.⁵

IDACI (2019)

9. The Income Deprivation Affecting Children Index (IDACI) measures the proportion of children under the age of 16 in low-income households for a particular area in England.⁶ It is calculated at lower-layer super output area (LSOA) level and is a supplementary measure to the Index of Multiple Deprivation (IMD), and therefore has been constructed for the Ministry of Housing, Communities and Local Government (MHCLG) by Oxford Consultants for Social Inclusion (OCSI) and deprivation.org. In this analysis, we use IDACI quintiles, where the most deprived areas are in quintile 1 and the least deprived are in quintile 5.

³ See www.gov.uk/government/statistics/english-indices-of-deprivation-2019.

⁴ See <u>www.officeforstudents.org.uk/data-and-analysis/institutional-performance-measures/technical-documentation/</u>.

⁵ The DfE does not accept responsibility for any inferences or conclusions derived from the NPD data by third parties.

⁶ See www.gov.uk/government/statistics/english-indices-of-deprivation-2019.

IMD (2019)

10. The Index of Multiple Deprivation (IMD) is a measure of levels of deprivation for a small area within England.⁷ It is calculated at lower-layer super output area (LSOA) level and uses several different measures to determine levels of deprivation. They have been constructed for the Ministry of Housing, Communities and Local Government (MHCLG) by Oxford Consultants for Social Inclusion (OCSI) and deprivation.org. In our analysis, we use IMD quintiles, where the most deprived areas are in quintile 1 and the least deprived are in quintile 5.

Level of study

11. This is sourced from the ILR and HESA student and student alternative records defined using IPLEVEL as described in the 2022 Core Algorithms document.⁸ It groups undergraduate study into three levels; 'Undergraduate with postgraduate components', 'First degree' and 'Other undergraduate'.

Local or distance learner

12. Local learners are identified by comparing home travel to work area with study travel to work area, which are calculated from home postcode and study postcode respectively. Local students are those whose home address is in the same travel to work area as their provider. Distance learners are those who are not in attendance at the provider for the vast majority of their course. That is, they are studying at a distance from their provider. These definitions are based on IPSTUDYLOCTYPE described in our 2022 Core Algorithms document.

NS-SEC

- 13. National statistic socio-economic classification (NS-SEC) is only collected in the HESA student record. It classifies the socio-economic background of students. For those students who are under 21 at the start of their course, NS-SEC is based on the occupation of their highest earning parent. For those students aged 21 or over at the start of their course, NS-SEC is based on the occupation of the student themselves prior to higher education. Occupations are coded using the Standard Occupation Classification (SOC) and then grouped further into these categories. ¹⁰
 - a. higher managerial, administrative and professional occupations
 - b. intermediate occupations
 - c. routine and manual occupations

⁷ See www.gov.uk/government/statistics/english-indices-of-deprivation-2019.

⁸ See <u>www.officeforstudents.org.uk/data-and-analysis/institutional-performance-measures/technical-documentation/.</u>

⁹ Data for this characteristic comes from the HESA variable SEC. See www.hesa.ac.uk/collection/c19051/a/sec.

¹⁰ See section 7 Classes and collapses at www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticssocioecon omicclassificationnssecrebasedonsoc2010.

d. never worked and long-term unemployed.

Parental higher education

14. Parental higher education is only collected in the HESA student record.^{11.} It gives the student's response to the question 'Do any of your parents have any higher education qualifications, such as a degree, diploma or certificate of higher education?'. HESA defines parents as 'natural parents, adoptive parents, step-parents or guardians who have brought you up.'

Predicted entry grade profiles

- 15. These are sourced from UCAS application data. These are the grade of qualification an applicant's school or college believes they are likely to achieve in the best possible circumstances.
- 16. The OfS received two variables, one with predicted A-level grades and one with predicted BTEC grades. The qualifications profiles are a combination of information of these. In Table C1, only grade profiles with 200 or more entrants in the modelling data are shown, although no such restriction was applied to the actual population used when modelling. Note that three predicted A-level grades equivalent to DDD or below are grouped in the 2 A-levels or fewer category, of which there were between 350 and 500 entrants in each of the five years of data included in the modelling of continuation rates.

Table C1: Predicted entry profiles for larger (200 entrants or more) predicted grade profiles

Predicted entry grades	Top three predicted A-level grades	Predicted BTEC grades
A-level: A*A*A*	A*A*A*	
A-level: A*A*A	A*A*A	
A-level: A*AA	A*A*B, A*AA	
A-level: AAA	A*AB, AAA	
A-level: AAB	A*AC, A*BB, AAB	
A-level: ABB	A*BC, AAC, ABB	
A-level: BBB	A*CC, AAD, ABC, BBB	
A-level: BBC	ABD, ACC, BBC	
A-level: BCC	ACD, BBD, BCC	
A-level: CCC and below	ADD, BBE, BCD, BCE, BDD, BDE, CCC, CCD, CCE, CDD	
BTEC: D*D*D*		D*D*D*
BTEC: D*D*D		D*D*D
BTEC: D*DD		D*DD
BTEC: DDD		DDD

¹¹ Data for this characteristic comes from the HESA variable pared. See www.hesa.ac.uk/collection/c18051/a/pared.

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Predicted entry grades	Top three predicted A-level grades	Predicted BTEC grades
BTEC: DDM		DDM
BTEC: DMM		DMM
BTEC: MMM and below		MMM, MMP, MPP, PPP
2 A-levels, 1+ BTEC	A*A	D*
	AA	D, D*
	AB	D, D*, M
	AC	D, D*
	BB	D, D*, M
	ВС	D, D*, M
	BD	D, D*
	CC	D, D*, M
	CD	D, D*, M
2 A-levels or fewer	A*, A, B, C, D, A*A, A*A*, A*B, AA, AB, AC, BB, BC, BD, CC, CD, CE, DD, DE, CDE, DDD, DDE	
BTECs of size 2 grades or fewer		D*, D, M, P, D*D (90 credit Diploma), D*D*, D*D* (90 credit Diploma), DD, DD (90 credit Diploma), DM (90 credit Diploma), MM (90 credit Diploma), MP (90 credit Diploma), PP (90 credit Diploma)
Other	-	-

Predicted entry qualification type

17. This variable is created by categorising the predicted entry qualification profiles (above) into three groups: A-levels, BTECs and Other. The categories are defined in the table below.

Table C3: Predicted entry qualification types

Predicted entry qualifications type	Predicted entry grades
A-levels	A-level: A*A*A*
	A-level: A*A*A
	A-level: A*AA
	A-level: AAA
	A-level: AAB
	A-level: ABB

Predicted entry qualifications type	Predicted entry grades				
	A-level: BBB				
	A-level: BBC				
	A-level: BCC				
	A-level: CCC and below				
	2 A-levels or fewer				
BTEC	BTEC: D*D*D*				
	BTEC: D*D*D				
	BTEC: D*DD				
	BTEC: DDD				
	BTEC: DDM				
	BTEC: DMM				
	BTEC: MMM and below				
	BTECs of size 2 grades or fewer				
Other	2 A-levels, 1+ BTEC				
	Other				

Sex

18. This is sourced from the ILR and HESA student and student alternative records defined using IPSEX as described in the 2022 Core Algorithms document. There are three categories: Female, Male and Other.

Subject of study

19. This is sourced from the ILR and HESA student and student alternative records defined from IPSBJ_CAH3 as described in the 2022 Core Algorithms document. We take the first part of this code to create the Common Aggregation Hierarchy level 1 (CAH1) codes that the IPJACS or IPHECOS code maps to. The mapping of JACS and HECOS codes to the Common Aggregation Hierarchy codes can be found on the HESA website.¹²

TUNDRA MSOA

20. TUNDRA (tracking underrepresentation by area) is an area-based measure that uses tracking of state-funded mainstream school pupils in England to calculate young participation.¹³ TUNDRA classifies local areas across England into five equal groups (quintiles) based on the proportion of 16-year-old state-funded mainstream school pupils who participate in higher education aged 18 or 19 years. Quintile one shows the lowest rate of participation. Quintile five shows the highest rate of participation. TUNDRA MSOA uses Middle Super Output Area (MSOA) as the definition of local area.

¹² See www.hesa.ac.uk/support/documentation/hecos/cah-list.

¹³ See www.officeforstudents.org.uk/data-and-analysis/young-participation-by-area/about-tundra/.

Annex D: Details of the statistical modelling of continuation

- 1. This annex describes the statistical model used to assess differences in continuation rates between English 18-year-olds entering OfS-registered higher education providers through conditional and unconditional offers, or 'other UCAS routes'.
- 2. The 'methodology' section of the report contains details of the population used in the modelling.

This annex only contains model results for 2019-20 entrants. Full model results, including fixed effect and for all years can be found in the datafile associated with this release.¹⁴

Model I

- 3. 172,650 English 18-year-olds entered higher education in 2019-20 at the OfS-registered provider with which they were placed through UCAS, excluding those placed through RPAs or Direct Clearing. We modelled the probability that these entrants were still in higher education in the year after they entered (the continuation rates).
- 4. Multi-level modelling was employed to investigate whether the observed differences in continuation rates between applicants placed through different offers and 'other UCAS routes' were related to the different characteristics of the applicants.
- 5. The model reported here includes the following factors (for definitions of the factors see Annex C):
 - provider where the applicant was placed through UCAS (random intercept)
 - entry route (conditional offer, unconditional offer, 'other UCAS route')
 - type of entry qualifications predicted at the time of application (A-levels, BTEC, other)
 - entry grades predicted at the time of application
 - subject studied
 - care leaver

¹⁴ Data file available at www.officeforstudents.org.uk/publications/update-to-data-analysis-of-unconditional-offers/.

- disability type
- ethnicity
- Income Deprivation Affecting Children Index (IDACI 2019)
- Index of Multiple Deprivation (IMD 2019)
- level of study
- local or distance learner
- national statistic socio-economic classification (NS-SEC)
- Parental education
- sex
- TUNDRA (tracking underrepresentation by area) quintile.
- 6. All factors listed above were modelled as fixed effects, except for the provider where the applicant was placed, for which we used a random intercept, such that entrants are nested within providers.
- 7. Having found that the association between unconditional offers and continuation varies in magnitude for A-level and BTEC entrants, we decided to interact the entry route variable with a predicted entry qualifications type variable, effectively producing separate estimates of the association for each of the predicted entry qualification types: A-levels, BTEC and other.
- 8. The predicted entry qualifications type variable is deterministically associated with the predicted entry grades variable (e.g. an applicant with predicted A-level grades A*BB on entry can only have a predicted entry qualifications type of 'A-levels'). This means that there are three reference groups in the parameter estimates for the effect of predicted entry grades (one for each type: A-levels, BTEC, other). Therefore, parameter estimates for predicted entry grades should be read as relative to the reference group given for that type of qualification.
- 9. The model is presented in Equation D1.

Equation D1: Model I format for continuation rate

Continuation rate ~ Binomial(const_i, π_i)

$$logit(\pi_{j}) = \beta_{0j} + \widetilde{\beta_{1}}(Entryroute_{ij} * Entryqualstype_{ij}) + \widetilde{\beta_{2}}Entryquals_{ij} + \widetilde{\beta_{3}}Subject_{ij} + \widetilde{\beta_{4}}CareLeaver_{ij} + \widetilde{\beta_{5}}Disability_{ij} + \widetilde{\beta_{6}}Ethnicity_{ij} \\ + \widetilde{\beta_{7}}IDACI_{ij} + \widetilde{\beta_{9}}IMD_{ij} + \widetilde{\beta_{10}}Level_{ij} + \beta_{11}LocalDistanceLearner_{ij} + \widetilde{\beta_{11}}NSSEC_{ij} + \widetilde{\beta_{12}}ParentalEducation_{ij} + \widetilde{\beta_{13}}TUNDRA_{ij} \\ + \widetilde{\beta_{14}}Sex_{ij}$$

$$\beta_{0j} = \beta_0 + u_j$$

$$u_j \sim Normal(0, \sigma_u^2)$$

Note: The βs represent the fixed effects coefficients relating to individual i at provider j. u_j is the random intercept for provider j. The $\tilde{\beta} s$ denote vectors of different sizes.

- 10. The estimates of the fixed effects coefficients are available in the data file that accompanies this publication.
- 11. Table D1 shows the model-estimated continuation rates if entrants were placed through conditional offers, instead of unconditional offers or 'other UCAS routes', and the difference between this estimate and the observed continuation rate for that group. This then indicates how much of the difference in raw continuation rates can be explained by the entrant being placed through an unconditional offer (or 'other UCAS route') instead of a conditional offer, rather than other underlying factors. When the difference is negative, this means we estimate that fewer entrants continued with their studies than would have done, if they had instead been placed through a conditional offer.
- 12. These estimates (and equivalent estimates in table D2) are calculated by 'sample enumeration'. This is where model predictions are obtained for observations where the characteristic of interest (entry route in this case) is forced to be equal to the reference group (conditional offers), when the observed value is not (unconditional offers). This then yields an estimate of the likelihood of continuation for everyone placed through unconditional offers, if they were instead placed through conditional offers. An average is then taken to calculate the 'model estimated continuation rate' in Table D1, from which the percentage point difference and the implied difference in the number of continuing entrants are derived.
- 13. 95 per cent confidence intervals are obtained by augmenting the estimate of the relevant element of the vector $\widetilde{\boldsymbol{\beta}_1}$, such as $\boldsymbol{\beta}_{1,3}$, (the coefficient estimate for A-levels: Unconditional offers), in Equation D1 with $\pm 1.96 \times \text{s. e.}(\widehat{\boldsymbol{\beta}_1})$, where s. e. $(\widehat{\boldsymbol{\beta}_1})$ is the standard error for the estimate of $\widetilde{\boldsymbol{\beta}}_1$. Then applying the inverse of the logistic function yields upper and lower bounds for the predicted probability of continuation for each individual, which

can be averaged to obtain confidence intervals for the continuation rate for the relevant group (such as A-level entrants placed through unconditional offers). We made no adjustment for multiple comparisons when calculating these confidence intervals.

Table D1: Model-estimated differences between continuation rates of those placed through conditional and unconditional offers in Model I (2019-20 entrants only) REF indicates the entry route is the reference group and pp is an abbreviation of percentage points

Predicted qualifications type	Entry route	Number of entrants	Continuation rate	Model- estimated continuation rate as if placed through conditional offer instead	Model- estimated difference in continuation rates relative to those placed through conditional offers	Upper 95 per cent confidence interval of model-estimated difference in continuation rates relative to those placed through conditional offers	Lower 95 per cent confidence interval of model-estimated difference in continuation rates relative to those placed through conditional offers
A-levels	Placed through conditional offer	84,440	97.2%	REF	REF	REF	REF
A-levels	Placed through unconditional offer	25,345	95.8%	96.1%	-0.3pp	0.0pp	-0.6рр
A-levels	Other UCAS route	23,425	96.0%	96.8%	-0.8pp	-0.5рр	-1.0pp
BTEC	Placed through conditional offer	11,950	90.4%	REF	REF	REF	REF
BTEC	Placed through unconditional offer	5,505	89.6%	90.0%	-0.4pp	0.6рр	-1.4pp
BTEC	Other UCAS route	2,185	86.7%	90.1%	-3.4pp	-2.1pp	-4.5pp
Other	Placed through conditional offer	12,305	92.7%	REF	REF	REF	REF
Other	Placed through unconditional offer	4,910	92.7%	92.4%	0.3pp	1.2pp	-0.6pp
Other	Other UCAS route	2,395	90.0%	92.6%	-2.6рр	-1.5pp	-3.6pp

14. A table of similar model-estimate differences for the other characteristics in the model that are characteristics in ABCS for full-time continuation can be found in the data file that accompanies this publication.¹⁵

Model II

- 15. A second model was run, identical to Model I, except for the use of a more detailed variable for 'entry route'. This allowed us to assess the association between different types of unconditional offer and continuation rates, instead of looking at all unconditional offers combined.
- 16. The estimates of the fixed effects coefficients are available in the data file that accompanies this publication.
- 17. Confidence intervals indicating whether the coefficients for each type of unconditional offer are different from conditional offers within each qualification type (for example, whether the effect of 'direct unconditional' offers differs from that of conditional offers for BTEC entrants only) are presented in Table D2.
- 18. Table D2 shows the model-estimated continuation rates if entrants were placed through conditional offers, instead of the given offer type, and the difference between this estimate and the observed continuation rate for that group. This table contains the data for 2019-20 A-level entrants used in Figure 6 in the report.
- 19. Although the model used to estimate these differences included entrants with all types of predicted qualifications, these estimates were calculated for entrants with predicted A-level qualifications only, having identified a consistent relationship between unconditional offers and continuation rates for these entrants (see Model I).

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¹⁵ Data file available at www.officeforstudents.org.uk/publications/update-to-data-analysis-of-unconditional-offers/.

Table D2: Model-estimated differences between continuation rates of those placed through conditional and unconditional offers in Model II (2019-20 entrants with predicted A-level qualifications only) REF indicates the entry route is the reference group and pp is an abbreviation of percentage points

Predicted qualifications type	Entry route	Number of entrants	Continuation rate	Model- estimated continuation rate as if placed through conditional offer instead	Model- estimated difference in continuation rates relative to those placed through conditional offers	Upper 95 per cent confidence interval of modelestimated difference in continuation rates relative to those placed through conditional offers	Lower 95 per cent confidence interval of modelestimated difference in continuation rates relative to those placed through conditional offers
A-levels	Conditional	84,440	97.2%	REF	REF	REF	REF
A-levels	Conditional unconditional	12,345	96.4%	96.7%	-0.3pp	0.1pp	-0.7pp
A-levels	Direct unconditional	4,330	94.6%	95.2%	-0.5pp	0.2pp	-1.2pp
A-levels	Other unconditional	8,670	95.5%	95.6%	-0.2pp	0.4pp	-0.7pp
A-levels	Other UCAS route	23,425	96.0%	96.8%	-0.8pp	-0.5pp	-1.0pp

