

A-LEVELS 2022
Return to Exams

Alan Smithers

Centre for Education and Employment Research
University of Buckingham, August 2022

Contents

Summary

1. Introduction	1
2. Seventy Years of A-Level Results	3
3. Trends in Entries by Subject	6
4. Escalation of Top Grades	13
5. Top Grades by Subject	16
6. Relative Performance of the Sexes	18
7. Countries of UK Compared	21
8. Prospects for 2022	23

Summary

The Government has asked the regulators to set boundaries so that the grades will be about half way between those of 2019 and 2021.

If this is delivered the pass rates will be 13.5% A*, 35% A*/A, 82% A*-C and 98.5% A*-E compared with last year's grades of 19.1% A*, 44.8 A*/A, 88.5% A*-C and 99.5% A*-E

Keeping entries at the 2021 level, in 2022, there will be about 80,000 of the exam entries not awarded the top grade they would have received last year. In fact, entries rose by 4%, so the shortfall becomes 82,500.

If we assume that that an average of two grades is dropped by each candidate affected then over 40,000 applicants will be at risk of losing their preferred place.

The 2022 tests are the first involving exams after two years of an enforced experiment. The much canvassed teacher assessment's day had come. What happened during the two years of teacher assessment? There was an explosion in top grades, a major swing to girls, big increases in top grades in the performing arts and practical subjects, and Wales overtook England. The question to be asked of the 2022 data is whether these changes will be reversed in the return to examinations.

With regard to the gender gap, my feeling is that, while there may be some movement, it is unlikely to be substantial for at least three reasons.

- The exams in 2022 have been different. The syllabus has been restricted and advance notice given of the topics on which questions have been set. In this form, they will, therefore, resemble course work – which plays to girls' strengths.
- The chances of getting a top grade will be higher, since 80,000 more top grades means they will be easier to get than when exams were last held.
- When there have been changes which have produced major swings to girls in the past, as with modularisation, the previous pattern of results has not re-emerged when they have been reversed.

Teacher assessment was also associated with large increases in the top grades awarded in the performing arts and practical subjects, such as music, drama, physical education, and design & technology. There were much smaller increases in the traditional examination subjects, like maths and economics. This will have had a bearing on the relative performance of the sexes since the pre-pandemic lead of boys at A* was dependent on just a few subjects, among which maths and economics were prominent.

It is hardly surprising that direct observation of performances should lead to better grades, than writing about the theory of them in written papers. But it does raise the question of whether traditional exams are an appropriate way of assessing all subjects. It will be interesting to see in the 2022 figures whether there is a return to the previous grade pattern or are there lasting changes.

A third change was Wales overtaking England in top grades. This can be traced to allowing the 2019 AS grades – an exam which has been retained in the Principality – to stand for the 2020 A-level results, if it produced the highest estimated grade. Will the old order be restored?

As regards the subject entries, the provisional figures suggest that the trends for recent years have continued.

- The astonishing growth of psychology and the other social sciences carries on, up by 10% in 2022.
- The sharp fall in English shows no sign of abating.
- Spanish established itself as the new French in being the main language taught in secondary schools.
- Biology has kept pace with the near three per cent increase in the number of 18-year-olds, but there is no lift-off for physics, chemistry and maths.

This purpose of this report is to describe the trends and circumstances that have led up to the 2022 A-levels results, and from them attempt to forecast what the outcomes are likely to be.

- If the regulators and exam boards successfully carry out the Government's wishes, the pass rates will be 13.5% A*, 35% A*/A, 82% A*-C and 98% A*-G. In terms of passes at A*/A there would be 80,000 fewer than in 2021, but 80,000 more than in 2019.
- The gap between girls and boys will be reduced, but girls will remain ahead.
- There will be a legacy of more top grades in the performing arts and practical subjects.
- England's and Wales' results will be close, and still lag appreciably behind those of Northern Ireland.
- The remarkable growth of psychology - the scientific humanity - will continue.
- English will decline further.
- French will decline and Spanish grow, so that Spanish becomes the new French as the staple language, but with paltry numbers in comparison with maths, psychology and biology.
- Computing will be the fastest growing A-level, but entries for maths, physics and chemistry will fall even though the number of 18-year-olds has increased by about 3%.

These outcomes are hugely important because A-levels are the main route into university. This year will be the most competitive ever for university admissions. There will be a place for everyone somewhere since there is no government cap on places, but the top courses will come under heavy pressure. Not only will there still be the extra top grades, but there is the carry-over from the Covid years, increased demand from mature and overseas students, and the number of 18-year-olds is rising, about half of whom are applying to university. Universities have reacted to the teacher-assessment boom in top grades by raising requirements and reducing firm offers. For many of this year's school leavers the hard work did not end with A-levels, but begins again on results day in the chase for the coveted places.

1. Introduction

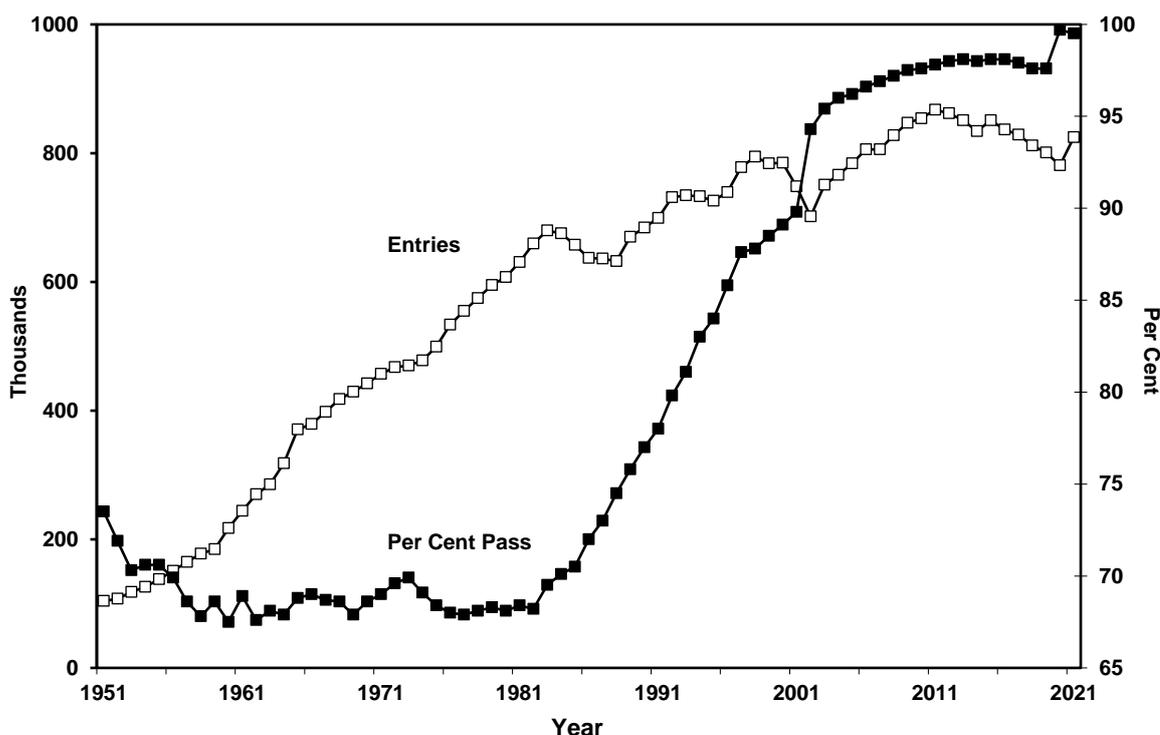
- 1.1. Each year in August, generally a quiet time for news, the nation's interest turns to the A-level results. In the run up to their release, nervous parents worry if their sons and daughters will get the grades they need for their precious university places. Will it be a generous year or has some tightening up occurred? The newspapers and other media attempt to help by reading the runes and offering predictions, which can be little more than guesses.
- 1.2. The forthcoming results, however, are different. We already know what they will be, since the Government and the regulators have told us. Left to their own devices, the exam boards would have, in effect, conducted a very interesting natural experiment. Would the return to exams bring the top grades down to the levels they were at in the decade to 2019, when exams were last held? Or would the big increase seen during the emergency measures of the Covid years be sustained?
- 1.3. But we already know that neither will be the case. In a letter to headteachers, dated 13 May 2022, Ofqual the regulator for England responsible for over 90 per cent of the entries, explained that while the Government's aim was for grades to return to pre-pandemic levels, it wanted this to be in two steps, with 2022 a halfway house. This was because it did not want the candidates, all of whom had experienced considerable disruption to their studies, to be further disadvantaged by receiving much lower grades than had been obtained in the two previous years.
- 1.4. Ofqual emphasized that the grade pattern was not to be decided in advance, but only after the marks were in, when grade boundaries would be set so as to pitch the outcome between those of 2019 and 2021. This brings home very clearly that the grades are not directly determined by the marks, but are awarded in line with policy, circumstances or what is deemed acceptable. This means that we cannot use the grades as an indicator of whether overall achievement is improving or declining.
- 1.5. The fact that we have prior knowledge of outcomes for 2022 may appear to take the fun out of them for the newspapers. But will the Government's intentions be adhered to and what of the other changes that the emergency arrangements brought in such as the swing to girls, the huge increases in top awards to performing arts and practical subjects, and Wales overtaking England. Each has a chapter to itself in what follows.
- 1.6. In CEER's annual prospective A-level reports looking at the trends up to the present, of which this is the latest, I too have attempted to discern what the forthcoming results would be. More often than not the predictions proved correct, so much so that it was assumed I had inside knowledge. Had I, I would not have been free to speak. The accuracy came from the regularity of the increases from year to year. By adding one per cent to the percentage pass rate each year, as Table 2.1 shows, I was able to come pretty close to the actual results. Imagine my chagrin when I was caught out in 2011. That year, Ofqual - which had newly become a dedicated regulatory body independent of the qualifications authority - decided unannounced to keep the lid on inflation by maintaining grades consistent from year to year.

- 1.7. Pass rates at the various levels were, therefore, kept much the same from 2011 onwards until Covid struck, when they went haywire. The 2020 exams had to be cancelled, but Ofqual was confident that the grades could be accurately calculated by fitting teachers' rankings into the grade pattern of the previous decade. It all seemed plausible and feasible, but in the event proved to be disastrous.
- 1.8. While the grade pattern of previous years could be reproduced by computer programme quite easily, fitting the schools' rankings into this mould was, to say the least, problematic. It threw up major anomalies, with candidates even receiving grades three down from what they were expecting and had been predicted to achieve. Not surprisingly, there was uproar, with loud and emotional protests that the calculated grades were ruining young people's lives.
- 1.9. Sensing a public relations and voter disaster, the Government immediately went for damage limitation and scrapped Ofqual's calculated grades (with its chief executive later losing her job) and announced that the grades in 2020 would be those that the teachers had predicted in university and employment applications. Job done? Not a bit of it. It soon emerged that some candidates would have received higher grades according to Ofqual's calculations. So it was decided to award whichever was the higher. Furthermore, Wales, which retains the AS, as an intermediate to A-levels, decided that the 2019 grades could be used if that were the best result among the estimates. Ironically, in the year that Michael Gove's extensive overhaul of A-levels making them more exam-based and reliable finally reached fruition, the country found itself faced with teacher assessment and the highest ever level of grade inflation.
- 1.10. In 2021, the hope that exams could take place had to be abandoned, but at least it was in time to allow for something more systematic to be arranged. Schools were requested to collect evidence on which to base their assessments using tests, assignments and projects, which would be available for inspection by the exam boards if required. The intention was for more realistic grades to be awarded, but in the event there were many more top grades than even in 2020. The generosity of schools and teachers, particularly in independent schools, evidently knew no bounds.
- 1.11. At last, in 2022, there has actually been a return to exams, but with some of the inflation of the Covid years retained. Beside the runaway top grades, teacher assessment was associated with other important changes. Girls moved markedly ahead. There was a swing to the performing arts and other subjective subjects, and away from maths and the physical sciences. There was also some geographical rebalancing, with Wales gaining ground on England and Northern Ireland.
- 1.12. We already know that, with the return to exams in 2022, there will be fewer top grades. But will there be reversion of the other changes as well?

2. Seventy Years of A-Level Results

2.1. Over the seventy years since A-levels became the national¹ examination for sixth-form education, the pass rate has risen from seventy per cent to all but one hundred per cent. Chart 2.1 traces that path. At the same time as the pass rate² was increasing, entries³ rose markedly from just over 104,000 in 1951 to nearly 825,000 in 2021. In short, many more of a greatly increased entry have been passed. Logically, if the same standards had been held to, one would have expected the pass rate to fall since a wider ability range was sitting the exams. So have our young people become smarter, or have standards been falling, or is there another explanation?

Chart 2.1: A-Level Passes and Entries in UK, 1951-2021



2.2. The money has to be on standards changing. The pass rate and overall grade pattern do not necessarily reflect actual performance. They can go up, remain the same, or come down according to where minimum marks for passing and reaching the various levels are set by the exam boards and regulator. For the first 35 years of A-levels' existence, the pass rate was close to 70 per cent. It was so consistent, because it had been held at that point - which if you think about it was hard on those who had shown sufficient promise at O-level to be allowed to progress to advanced work. In 1987, the 70 per cent benchmark was replaced by a standards-based system whereby anyone who met the criteria to receive a grade was awarded it, irrespective of how many

¹ Not Scotland which has its own awards.

² The overall pass rate is taken as the criterion in this general look at the changes over 70 years, since letter-grades were not introduced into A-levels until 1963. Before that there were simply the awards of distinction, pass and fail.

³ Exam entries, not individuals - who usually take several subjects.

others had so qualified. As chart 2.1 shows results really took off with this decision. In theory, criterion-referencing is much better than fixed quotas since some of the grade bands could be very narrow with just a few marks separating, for example, grades B and D. It was also argued that fixed the percentages concealed how good or bad the overall performance was, whereas with standards-based awards one could see the actual rises and falls from year to year, and if necessary make improvements to the education system. But this does not reckon with the difficulty of setting criteria so that they can be consistently applied.

- 2.3. Chart 2.1 shows the consequences of criterion referencing. In 1987, when the new approach had bedded in, the pass rate was 73 per cent. From then until 2010 it rose by about one percentage point a year reaching 97.6 per cent. It seems that the exam boards felt that they had done a good job if the results came out about one percentage point higher than the previous year.
- 2.4. An exception was 2002, when the first grades were awarded on the fully modularised A-level courses which had replaced the traditional linear versions in 2000. In that year, the A level pass rate leapt by 4.5 percentage points. This caused great consternation leading to the resignation of both a minster and the Chair of the Qualifications and Curriculum Authority, which oversaw public exams at that time. But there was no mismanagement. The hike reflected the fact that it was easier to accumulate high marks through the assessment by various means of small chunks of the course rather than in an externally-set and externally-marked invigilated examination at the end.
- 2.5. Nevertheless, it was a further contribution to inflation. Regulation was toughened up in 2010, when Ofqual was established as the dedicated independent regulator of qualifications in England (there were counterparts in Wales, Northern Ireland and Scotland), having been set up initially as part of the Qualifications and Curriculum Authority in 2008. From the outset, it showed itself to be determined to get to grips with the rampant inflation of the previous quarter of a century, and it devised a statistical method for keeping the grades as comparable as possible over time and between subjects. So from 2011 to 2019 the overall pass rate remained at close to 98 per cent and the letter-grades showed similar consistency.
- 2.6. It took the emergency arrangements of 2020 to give the overall pass rate the final push to 100 percent (strictly speaking 99.7 per cent). Without any constraints, the teachers let their generosity run wild. There is a sudden jump, as Chart 2.1 shows, where there had been the consistency for a decade. It might have been expected that, with the more systematic evidence-based arrangements for teacher assessment that were possible in 2021, the inflated grades of 2020 would have subsided. But quite the reverse. There were further substantial rises in 2021. When the grading of high-stakes public assessment is left to the teachers, it is evident that their natural optimism for their pupils is the over-riding factor.
- 2.7. In 2020, entries decreased, as they had done in the four preceding years, with the fall being in line with a decrease in the number of 18-year-olds. But in 2020 it is also possible that the drop in entries could also have come from schools not putting forward pupils who they couldn't pass, knowing that there was no examination in

which they could redeem themselves. In 2021, the first year of a decade in which the 18-year-old population is projected to increase by a quarter, entries started rising once more.

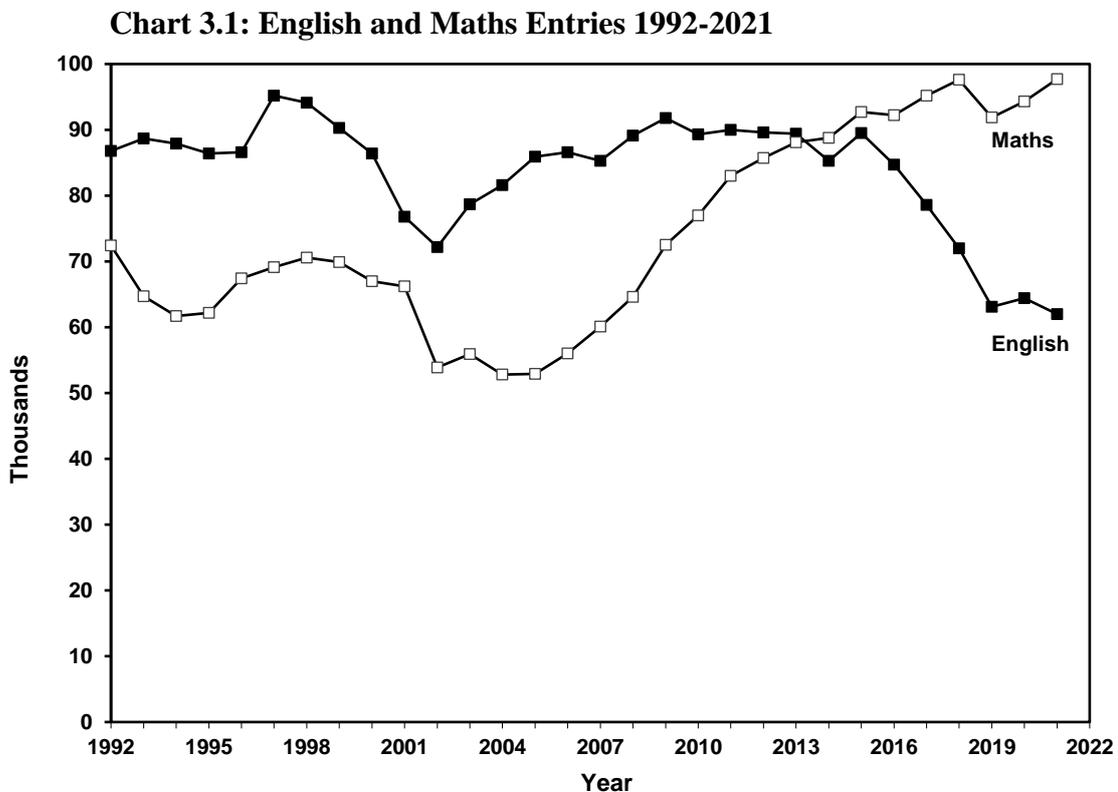
- 2.8. The overall picture from Chart 2.1 is that, remarkably, the pass rate and top grades have gone up as entries have increased. For this to be improved performance, standards would have had to be maintained from year to year. But given the changes in the assessment process from a quota-based system, to a criterion-referenced one, to a modular one, then back to whole courses and, during the worst of Covid, exams having to give way to teacher assessment, this looks to be untenable. More likely the rising grades stem from changes to the way in which performance is measured. In part, this will have been driven by the political wish for more young people to go on to higher education for which the gateway would have had to be widened.

3. Trends in Entries by Subject

- 3.1. There have been significant shifts in subject entries in the past 30 years. Some subjects, like the social sciences, have burgeoned, but others, such as French and German, have been in steep decline. There will have been many drivers, chief among which will have been government decisions, changing tastes and the size of the 18-year-old population. In this chapter, we look closely at four groups of subjects. First, English and maths, the most frequently taken subjects. Then, in turn, we consider languages, the social sciences, and the natural sciences. The data are taken from the figures published, along with the results, each August by the Joint Council for Qualifications.
- 3.2. Each year also Ofqual publishes in May the provisional A-level entries in England, over 90 per cent of the UK total. We thus have a preview of the 2022 entries. Our sixth chart in this chapter shows how the four subject groups have fared in the most recent figures.

English & Maths

- 3.3. One or other of English⁴ or maths⁵ has been the most frequently taken A-level for most of the 30 years covered in Chart 3.1.



⁴ English literature, English language and English language and language and literature combined.

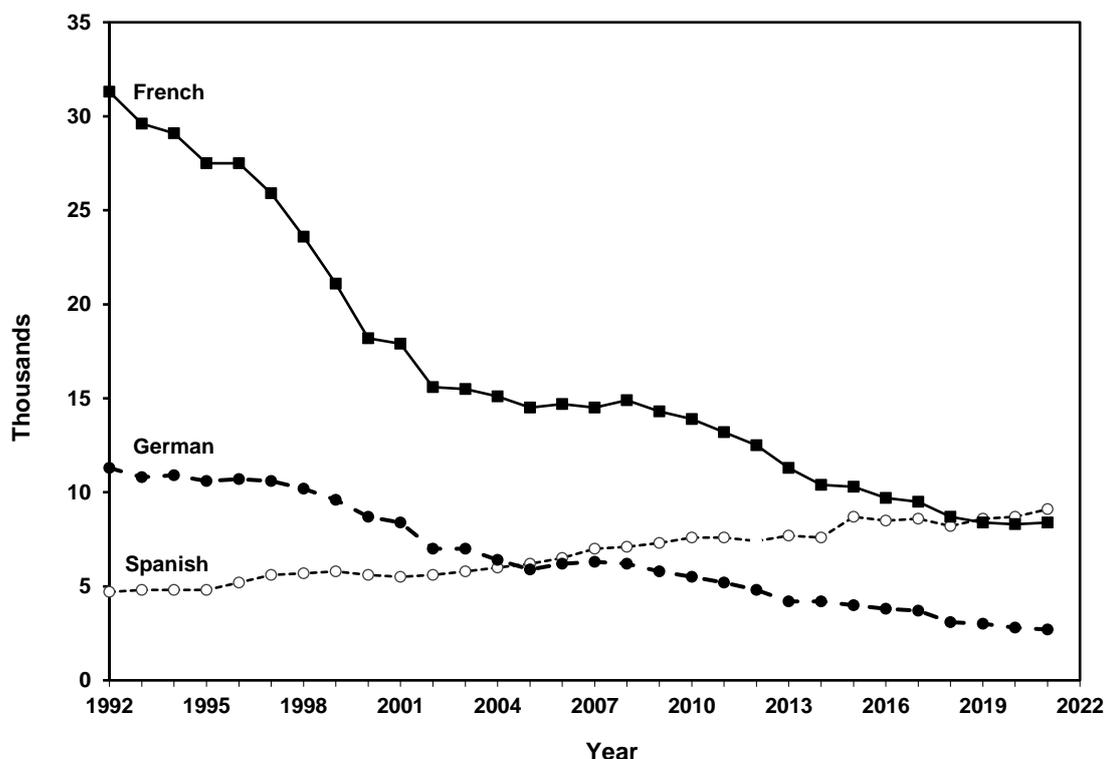
⁵ Does not include further maths.

- 3.4. English was overtaken by maths at the top in 2014, and following its recent slump it has also fallen behind both biology and psychology. The provisional entries for 2022 English take-up is still falling. Meanwhile entries to further maths trebled.
- 3.5. Taking the longer view, English was in 1992 way ahead of maths. Both fell in the run-up to A-level modularisation in 2002. Then both grew strongly. But English recovered most of the ground that it had lost in the late nineties reaching over 90,000 once more, in 2011 it began falling away, first slowly and then more rapidly. Maths, in contrast, continued its growth almost doubling⁶ its numbers from 2005 to be within touching distance of 100,000 by 2021. Its take-off in 2005 can be traced to the easing of exams following many complaints that the Dearing reforms of 2000 had made A-level maths too hard. What has driven the subsequent growth is a matter of conjecture but it has coincided with a major push to boost the STEM⁷ subjects.

Languages

- 3.6. English has not been the only language where entries have declined sharply. Chart 3.2 shows that both French and German have experienced even steeper decline. Entries to French in 2021 were only a quarter of what they were in 1992. German has fallen to a fifth of its 1992 take-up, and it is now the least frequently taken of all the 30 A-level categories⁸, attracting only about half as many entries as the next lowest - classical subjects.

Chart 3.2: Trends in Entries to Modern Languages



⁶ From 52.9 thousand in 2005 to 97.7 thousand in 2021.
⁷ Science, Technology, Engineering and Maths
⁸ Ofqual provisional A-level entries for England in 2022.

- 3.7. Spanish bucks the trend. Over the 30 years of Chart 3.3, it has grown steadily from 4,700 in 1992 to 9,100 in 2021, overtaking French in 2019. Even now, however, entries are low compared with the near 100,000 in maths. In the provisional entries for England in 2022 its ranks 24th out of the 30 subjects. Not shown in Chart 3.2 is ‘modern foreign languages’, where the graph tangles with the three others making it hard to decipher. It includes a wide range of languages from around the world and is frequently taken by native speakers. From 4,400 entries in 1992 it reached 9,970 in 2018 to be above both French and Spanish, but then it declined sharply particularly during the Covid years to be only 5,300 in 2021. It could have been an effect of the pandemic, but more likely it was Brexit, since Polish and Italian were among the more commonly taken.
- 3.8. The proximal cause of the low take-up of languages at A-level is the small numbers sitting them at GCSE. Since languages were made optional at this level in 2004 there has been a sharp decrease. Instead of compulsion, the Government had hoped to encourage pupils to study at least one foreign language by including them in the ‘EBacc’ core curriculum. This was intended to give a nudge to schools to teach key subjects, including a language. Ambitious targets⁹ were set, and schools made accountable for progress towards them. But while there has been no difficulty in reaching the targets for four of the subjects, the lack of enthusiasm for language learning continues to frustrate attempts to get a full house.
- 3.9. There are several possible reasons for this reluctance. Perhaps it is because English is a world language and the British take it for granted that the people of other countries will speak it. Spanish is also a world language and that may account for its increasing popularity. It could also be that there is a vicious cycle: too few passes at A-level makes it difficult to fill the places at university, so the pool from which teachers are recruited is too small, and this impacts on the availability and quality of the teaching. But around the world there are, of course, many native speakers of these languages and our teachers could be drawn from among their ranks if their English is good enough. Another contributory factor to the shortfall may be that in Britain teaching of languages does not usually start till secondary school, when receptivity to language learning is much less than it is in younger children. It is not clear why we do not teach languages from the earliest years as other countries do.

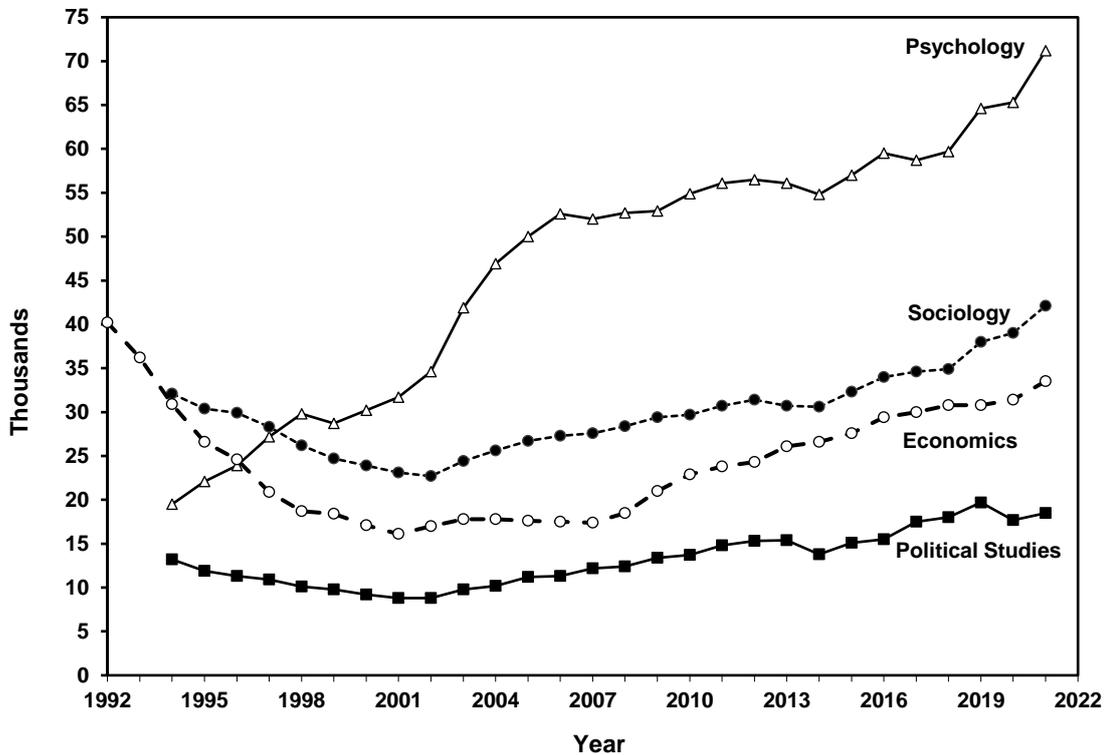
Social Sciences

- 3.10. The other side of the coin from languages are the social sciences. As Chart 3.3 shows, there has been almost continual growth for at least two decades. Psychology has burgeoned. Since it first became available in 1994, in round figures entries have increased from 20,000 to over 70,000. In Ofqual’s provisional entries for A-levels in 2022, it has put on a further 11.6 per cent. It stands second only to maths in its popularity. One can speculate that this explosion has something to do with it appearing to offer insight into some of the great mysteries such the nature of consciousness, what lies behind human behaviour, and making sense of human interaction. Access to the meaning of life has become ever more important with the

⁹ Targets: three quarters of Year 10 pupils to be taking EBacc combinations by September 2022, with 90% by September 2025.

loss of religious faith in much of the Western world. It is also true that psychology is not an exact, replicable subject in the way that maths, the physical sciences, and languages are, so there is less risk of being exposed as someone who cannot really do it, which makes it appealing to the broader range of students attracted to university education.

Chart 3.3: Trends in Entries to Social Sciences



3.11. Sociology has similarly climbed, though more slowly, to become the fifth most frequently taken subject in England. One can see the attraction of a subject which offers an understanding of the structure of society and ways to change it, which makes it very attractive to activists. Political studies while slower to take off than psychology and sociology has been progressing steadily, with numbers more than doubling from 2001 to 2021. Politics is now constantly in the spotlight which makes the systematic study of it very appealing, especially to those who see it as the path to power. Both political studies and sociology, as Chart 3.6 shows, greatly increased their A-level entry in 2022, rising by 12.2 and 9.5 per cent respectively. Like psychology, they are not objective subjects, so there is always room for theories not grounded in evidence.

3.12. Economics is different being essentially a quantitative subject, with a different trend line. While like the others classified as social sciences it has grown since the turn of the century, this reverses the decline from 1992 to 2001 with A-level entries falling from 40,200 to 16,100. The increase from 2001 onwards reverses this decline to some extent with numbers reaching 33,500 in 2021. The provisional figures for 2022 show a further increase of 9.3 per cent.

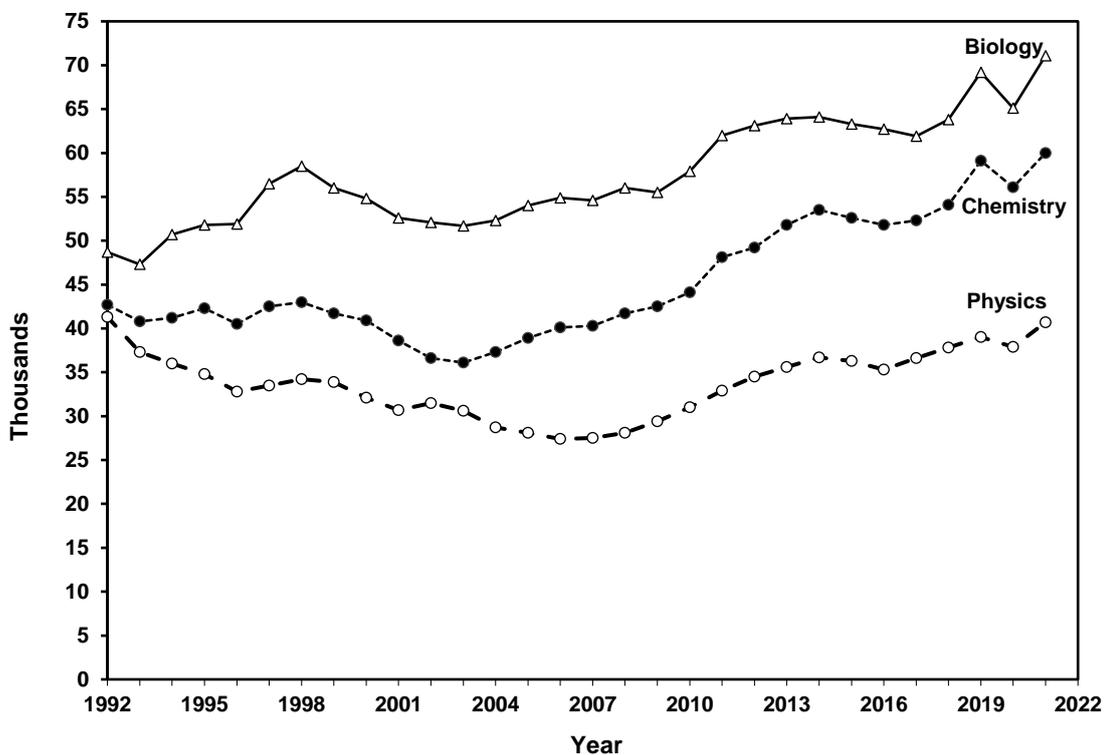
3.13. The pivotal year for all of the social sciences when growth really took off is 2002, which significantly is the year when the new fully modularised courses came on

stream. Evidently this made the subjects more attractive to students. Another factor was the great expansion of provision and Blair’s target of half of 18-30 year-olds to go on to higher education. This brought in many young people without the special talents required to take many of the traditional subjects to a high level so they looked further afield. Growth was temporarily halted in the year that the Gove reforms reintroduced end-of-course exams, which was 2017 for three of the subjects and 2019 for political studies. But has resumed since, as Chart 3.6 shows, with big increases in the provisional entries for 2022.

Sciences

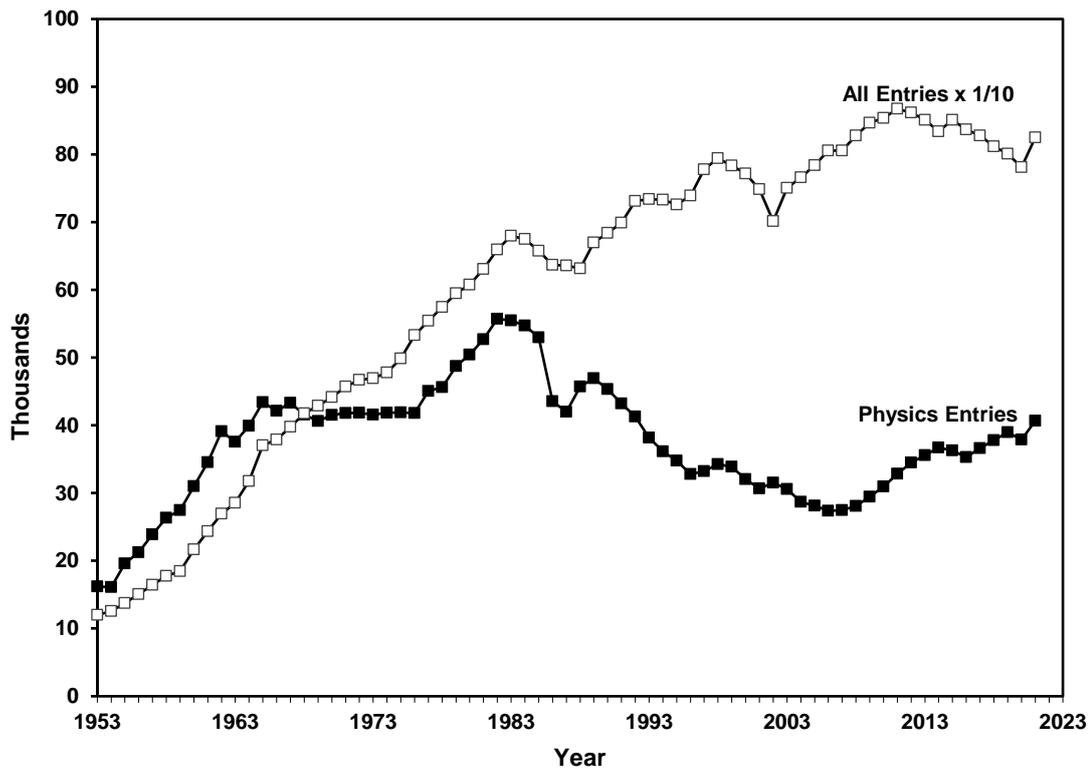
3.14. The sciences have also seen increased take-up in recent years with biology always the most popular, followed by chemistry, with physics some way behind. Gordon Brown, in 2004, when he was Chancellor of the Exchequer, incentivised schools to return to the separate sciences as part of his Science Investment Strategy. Chart 3.4 shows that this seems to have borne fruit with all three science A-levels rising in the years which followed.

Chart 3.4: Trends in Entries to Sciences



3.15. There were falls from 2015 along with the declining cohort, but with the introduction of the reformed A-levels in 2017 numbers picked up again. Unlike English and maths, the exam reforms appear to have boosted the take-up of the sciences. Perhaps this is not unconnected with the removal of practicals from the exams. The increases are, however, far from a swing to the sciences. As Chart 3.5 shows, the 2021 physics entry of 40,700, as encouraging as it is, is still 20 per cent down on the levels of the 1980s.

Chart 3.5: A-Level Physics Entries 1953-2021



3.16. The slump occurred following the introduction in 1988 of the National Curriculum in which the separate sciences were combined into one subject ‘science’. This was said to be necessary to be able to fit in three subjects into a time-slot for only two. But it was also ideological responding to claims that it was aiming to make it accessible to all, since the subject was now to be compulsory up to the age of sixteen. The O-Level exams in biology, chemistry and physics were to be replaced by single and double GCSEs in science. The separate sciences may have disappeared altogether had not the independent schools fought a strong rear-guard action which won the concession that pupils could still take exams in the separate sciences provided they took all three. This was too high a hurdle for all but the independent schools, grammar schools and leading comprehensives, but it preserved the separate sciences and they were there to be revived.

3.17. Most schools obeyed the party line and switched to ‘science’ as the subject. The consequences in terms of A-level exam entries can be seen in Chart 3.5. From 45,300 they went down to 27,400 in 2006. It is also true that there was a steep decline in the number of 18-year-olds from 1983 to 1995, and both overall A-level entries and physics entries declined, but both recovered. In 1990, however, their ways parted with physics falling sharply while total entries went the other way. It does look, therefore, as though the removal of the separate sciences at GCSE in most schools was a major factor in the drop. It is understandable that if all three subjects are wrapped up together 16-year-olds will not have had the opportunity to develop the confidence that they were sufficiently good at, say physics, to risk their futures on it. The problem was also exacerbated by ‘science’ being mainly taught by biologists, since physics teachers, particularly, and chemistry teachers were in short supply.

Prospects for 2022

3.18. We have referred to Ofqual’s provisional A-level entries for England several times already. In Chart 3.6 they are displayed for the four subject groups we have focused on. Although they are provisional and for England only they give a very good indication of what will happen on the day.

Chart 3.6: England Provisional Entries

Subject	Entries in Thousands		%Change
	2021	2022	
Mathematics ¹	90.29	89.61	-0.8
English ²	57.53	53.97	-6.3
French	7.73	7.44	-3.7
German	2.53	2.68	+5.9
Spanish	8.47	8.64	+2.0
Psychology	68.31	76.27	+11.6
Sociology	39.83	43.59	+9.5
Economics	32.70	35.76	+9.3
Political Studies	17.07	19.15	+12.2
Biology	63.77	66.22	+3.9
Chemistry	55.49	54.87	-1.1
Physics	37.56	36.77	-2.1
All Subjects	756.23	788.13	+4.2

1. Does not include Further Maths.

2. Entries for English Literature, English Language, and English Literature & Language Combined.

Source: Ofqual (May 2022) Provisional Entries for GCSE, AS and A-Level, Summer 2022 Exam Series. Applies to England.

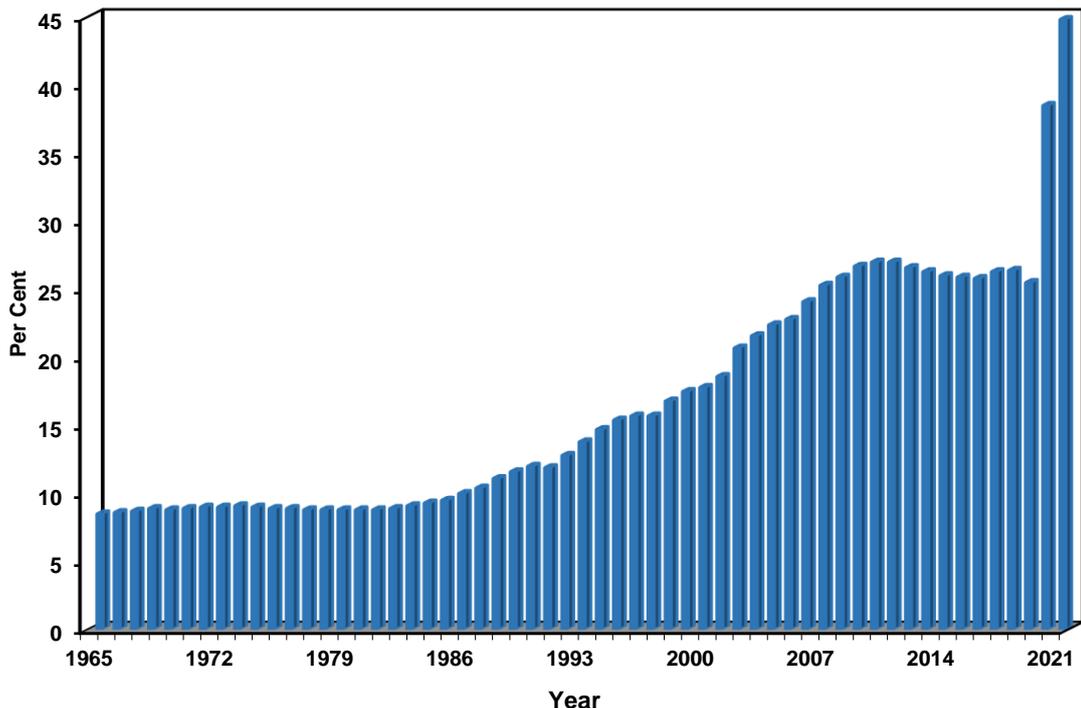
3.19. It shows that in most cases the trends continue. The social sciences and biology continue to press ahead. Spanish also continues to rise. But against an expanding 18-year-old population and an overall increase in A-level entries of 4.2 per cent, there is a further sharp decline in English, and another fall in French.

3.20. In a few cases there are reversals. German enjoys a rare boost although still at the bottom of the pile. Maths, physics and chemistry show small falls. Whether these are the beginning of new trends remains to be seen. More likely, as we emerge from the pandemic, they are blips.

4. Escalation of Top Grades

- 4.1. In Chapter 2 we saw that over the seventy years of A-levels, the overall pass rate has risen from 70 to 99.7 per cent, with the final push to everyone passing being given by the switch to teacher assessment during the Covid years. In this chapter, we focus on the top grades. The pattern is as described for the overall pass rate, but in exaggerated form since the major increases during the pandemic were in the top grades.
- 4.2. This can be seen very clearly in Chart 4.1 when a decade in which top grades had not risen (if anything there had been slight falls), the percentage of A*/As had leapt from 25.5 to 38.6 to 44.8 per cent. This dramatic rise is associated with the enforced switch to teacher assessment from end-of-course independently set and marked examinations.

Chart 4.1: Trend in A/A* Grades



- 4.3. Chart 4.1 traces the percentage of A*/A awards from soon after¹⁰ a letter-grade system of awards was introduced through to 2021. During the period 1963 to 1986 the proportion of A¹¹ grades was specified as 10 per cent and the exam boards kept comfortably within that limit. But then in 1987 the cap was lifted and the percentage bounded upwards under the new criterion-referencing arrangements whereby anyone

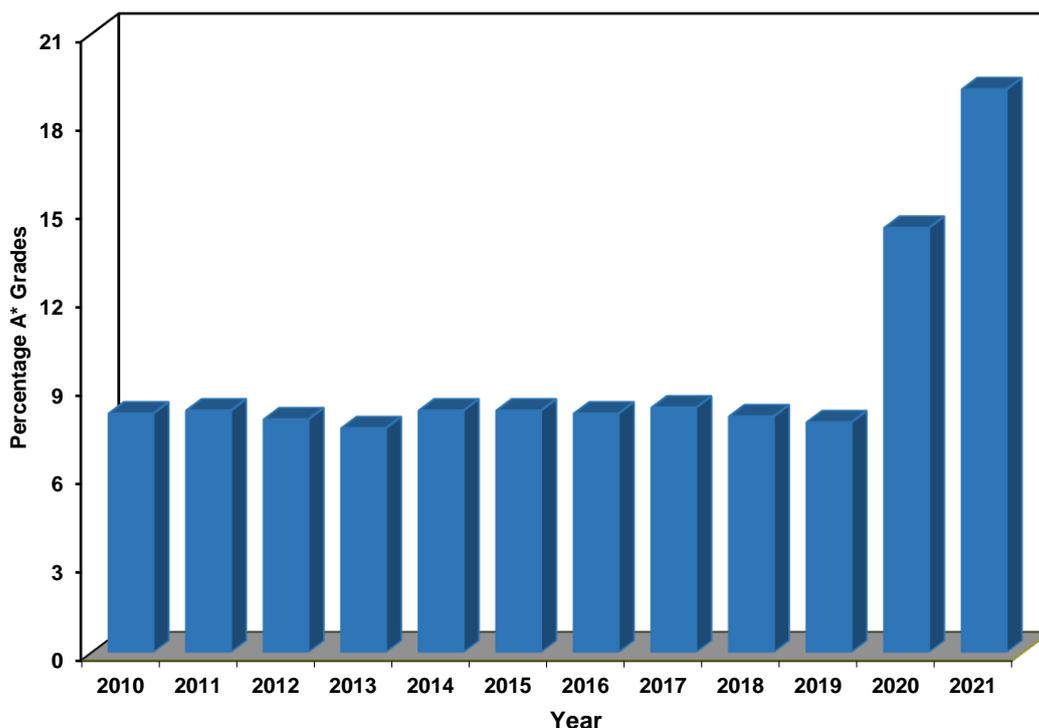
¹⁰ Letter-grades were introduced in 1963, of which the first two years have been omitted – both below 10% as prescribed – to keep the labelling of the axis tidy.

¹¹ An A* was not introduced until 2010.

meeting a set standards received the award. By 2007 the pass rate at A grade had nearly trebled to 27 per cent and grade inflation was hitting the headlines.

- 4.4. An embryonic Ofqual¹², established in 2008 within the Qualifications and Curriculum Authority, took a close interest in grade inflation and A grades from then on tended, if anything, to fall slightly. That is until the big bang of Covid. The ensuing emergency measures led to the steep rise in top grades shown in Chart 4.1. The 25.5 per cent awarded A*/A grades in 2019 became 38.6 per cent¹³ in 2020, an increase of 50 per cent. In 2021 there was more time to prepare for teacher assessment and for it be made more systematic, so one might have expected grades to fall to what they had been. But quite the opposite happened: A*/A grades increased even more so that approaching half of all entries were awarded a top grade (44.8 per cent).

Chart 4.2: Percentage A* Grades



- 4.5. Such had been the growth in A grades from 1987 that it was decided to bring in from 2010 an A* grade with a cap of 10 per cent, in effect creating a grade with the value that the A grade itself had once had. Chart 3.2 shows it remained within this limit until the emergency arrangements of 2020 led to a near-doubling from 7.8 per cent to 14.4 per cent. This increased still further in 2021 to 19.1 nearly twice the limit imposed on the A-grade only just over a decade ago.
- 4.6. In 2022 exams return and the grades could have been expected to drop back to 2019 levels, but the Government has intervened. In recognition of the many disruptions the students will have suffered and that they will be in competition for university places

¹² First within the Qualifications and Curriculum Authority becoming independent as Ofqual in 2010.

¹³ Just conceivably, 2020 falls on where the inflation line from 1987 to 2010, would have been if Ofqual had not intervened to halt the runaway growth.

with students who deferred entry from the Covid years, it has asked the regulator to ensure the percentage of top grades comes about half-way between those of 2019 and 2021. We can, therefore, look forward to A* grades being between 13 and 14 per cent and all A grades being about 35 per cent of the total awarded.

- 4.7. In terms of numbers, keeping the entry figures at what they were in 2021, we find that 160,000 more top grades (A*/A) were awarded in 2021 than in 2019, the last year that exams were held. That is on top of the 210,000 awarded in 2019. Given the Government's action to restore the value of top grades by reducing the percentage awarded to where it was in 2019 in two steps, there will be a fall of about 80,000 this year. In fact, it will be a bit more because entries have risen by four per cent.
- 4.8. This is likely to result in thousands of students not getting their first choices at university as they would have done last year. But just how many can only be an estimate since most entrants take three A-levels (the average is 2.66). We do not know how the dipped grades will spread across the students. If we assume that the average of dropped top grades by those affected is two, this will mean 40,000 students. If it was more often just one grade lower than it would have been, then the number of students could be as high as 60,000. However many, it is evident that the turbulence caused by the necessary correction will make results' day disappointing for many students and parents this year.
- 4.9. If they are unable to take up their conditional offers and have to look again they will find that 2022 is likely to be the most competitive ever for the sought-after places. Not only will there be the extra 80,000 top grades above the 2019 numbers, but there is the carry-over from the Covid years when there were too many top grades for the places available. There is increased demand from people who have re-thought their lives during lock-down and want to study as mature students, and increased interest from high-paying overseas students who are attractive to universities as a source of income. Moreover, the number of 18-year-olds is rising, of whom an increasing proportion is applying to university. About half the cohort now wants to go there.
- 4.10. Universities have reacted to the teacher-assessment boom in top grades by raising requirements and reducing firm offers. They are likely to stick closely to these requirements. For many of this year's school leavers the hard work did not end with A-levels, but begins again on results day in the chase for the coveted places.

5. Top Grades by Subject

5.1. Not only were many more top grades awarded during the Covid years, but as Chart 5.1 shows there was a major redistribution across the subjects. Generally speaking, the performing arts and practical subjects were the gainers and traditional examination subjects the losers, with the deliberate attempt to boost grades in the languages also showing through.

Chart 5.1: Comparison of A*/As Awarded in 2021 and 2019

JCQ Subject Categories ¹	2021		2019		2019-21 Increase ²
	%A*/A	Rank	%A*/A	Rank	
Music	54.8	8	19.3	20	35.5
Drama	48.8	10	18.0	22	30.8
Other Modern Languages	82.1	1	51.5	2	30.6
Physical Education	43.5	20	14.7	27	28.8
Spanish	63.2	4	34.9	6	28.3
German	67.7	3	40.4	4	27.3
Performing / Expressive Arts	51.1	9	24.0	15	27.1
Computing	44.5	17	17.6	23	26.9
Design and Technology	42.2	22	15.9	26	26.3
Classical subjects	60.2	6	34.4	7	25.8
French	60.3	5	36.4	5	23.9
Religious Studies	44.4	18	21.5	19	22.9
Mathematics (Further)	75.5	2	53.1	1	22.4
All other subjects	36.2	26	14.1	28	22.1
Biology	45.1	16	23.5	16	21.6
History	43.3	21	22.5	18	20.8
Political Studies	46.5	15	26.0	13	20.5
Psychology	37.0	25	16.5	24	20.5
Chemistry	48.6	11	28.4	9	20.2
English Literature	44.0	19	24.1	14	19.9
Physics	46.8	12	27.5	11	19.3
English Language & Literature	31.3	30	12.1	30	19.2
Art & Design subjects	46.7	14	27.7	10	19.0
Media / Film / TV Studies	29.6	31	11.0	32	18.6
Geography	41.8	23	23.3	17	18.5
Business Studies	32.4	28	14.1	29	18.3
Economics	46.7	13	28.7	8	18.0
English Language	27.5	32	11.3	31	16.2
Law	31.9	29	16.0	25	15.9
Mathematics	55.2	7	40.5	3	14.7
Sociology	32.5	27	18.1	21	14.4
Other sciences	41.3	24	27.2	12	14.1
All Subjects	44.8		25.5		19.6

1. 32 not 30, because the three English exams are included separately.

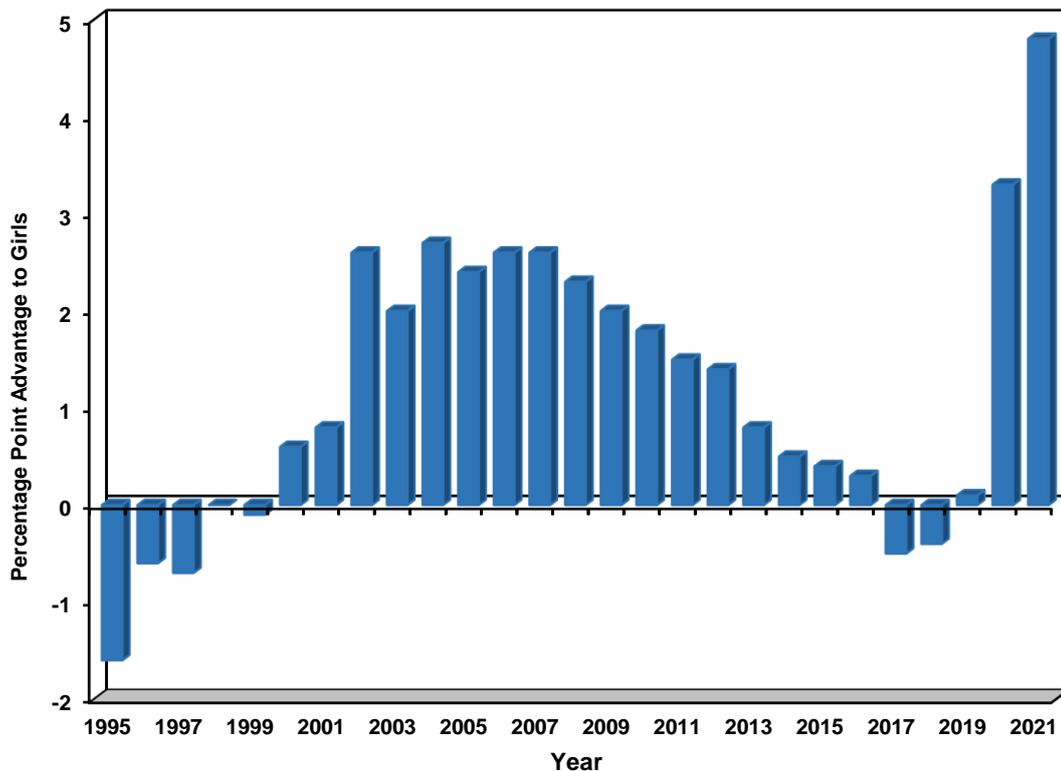
2. In percentage points.

- 5.2. The award of top grades nearly doubled from 2019 to 2021, rising from 25.5 per cent to 44.8 per cent. Chart 5.1 shows there were increases in every subject, but ranging widely from 35.5 to 14.1 percentage points. This led to some substantial changes in the rank order. Music and drama each rose 12 places, while ‘other sciences’ dropped by 12 from 12th to 24th place. Some extraordinary percentages of top grades were awarded in 2021. In ‘other modern languages’ - quite frequently taken by native speakers – it was 82.1 per cent, in further maths, 75.5 per cent, and in German, Spanish and French it was in the sixties. The poor relations were English language and literature with 31.3 per cent, media/film and TV studies with 29.6 per cent, and English language with 27.5 per cent.
- 5.3. There seemed to be two main drivers of the reshuffling of A grades, the enforced change to the mode of assessment and a policy decision. It seems that different qualities stood out in the different forms of assessment. Performing arts and practical subjects had a chance to shine when decisions were in the hands of the teachers, which they perhaps do not get in written exams. The main beneficiaries were music and drama, with performing/expressive arts also in the top ten. They were accompanied by two other groups of subjects, first practical subjects, such as physical education, design & technology and computing, and, secondly, languages, with ‘other modern languages’, Spanish and German in the top ten and French in 11th spot. Here the bonanza is more likely to be due to a decision to raise the grades in these subjects in a bid to make them more attractive in the hope of counteracting the disastrous falls we reported in Chapter 3.
- 5.4. Subjects which had done well in traditional exams tended to slide down the scale. Most notable was maths, the most frequently taken subject, dominated by boys, which came 30th out of the 32 subjects ranked on their percentage point increases. This is likely to impact on the relative performance of girls and boys, which we will be exploring in the next chapter. Along with maths in the bottom ten were ‘other sciences’ and economics (two other subjects in which boys are in the majority), English language, geography and art & design. In part, this was because they were previously high scorers. At the bottom also were the habitually low-scorers with not much of a base to build on, such as sociology, law, and business studies.

6. Relative Performance of the Sexes

6.1. There was a major swing in top grades from boys to girls in the Covid years. Chart 6.1 shows the trend in the 27 years from 2005 to 2021. What is striking is how exceptional the results for the last two years are. The gap in favour of girls in 2021 of 4.8 percentage points is by some distance the largest ever, surpassing the previous front runner of 3.3 points in 2020.

Chart 6.1: Gender Gap at A*/A



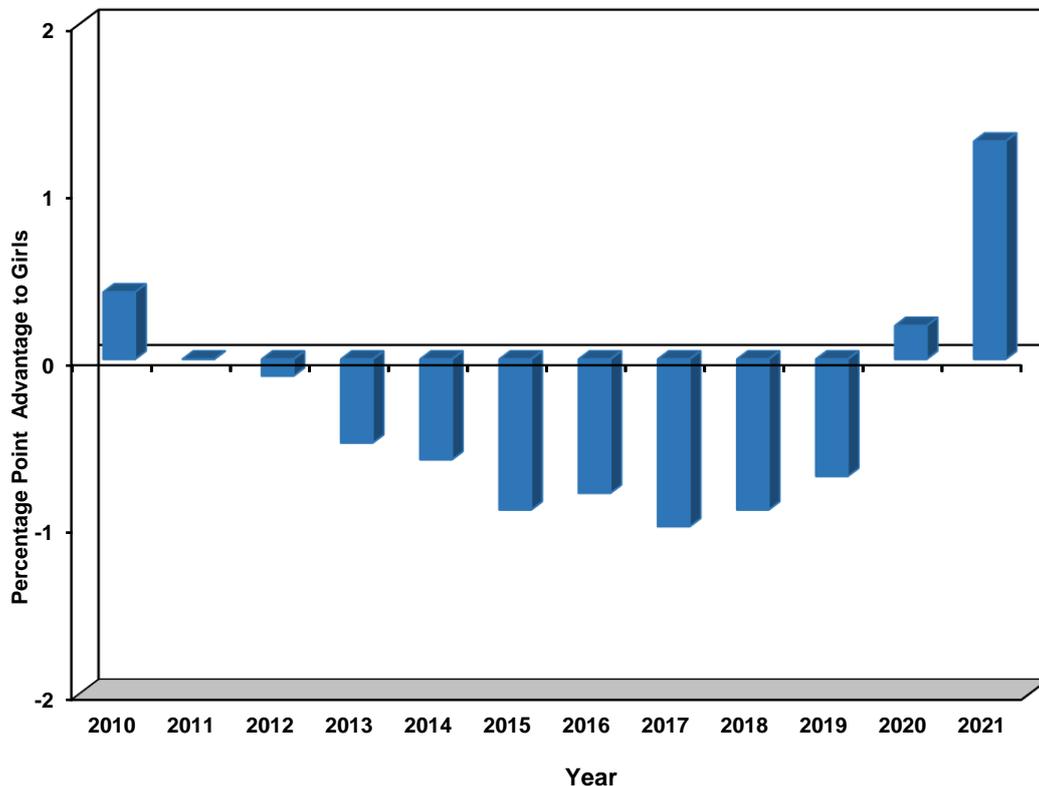
6.2. Chart 6.1 shows the advantage has oscillated between boys and girls. Boys were first ahead, then girls took over, only for boys to regain the lead, with the changes forming a smooth curve. Its shape corresponds quite closely to changes in the course structure and mode of assessment. In the nineties, A-levels were mainly two-year courses examined at the end, then from 2002 onwards grades were arrived at by the accumulation of module assessments, until 2017 when the Gove-reforms took us back to end-of-course exams. But this neat pattern was shattered by the emergency arrangements of the Covid years.

6.3. The picture is just as sharp when only A* grades are considered. Chart 6.2 shows that, in the eight pre-pandemic years, boys were ahead, but 2020 saw girls nudge ahead by just 0.2 percentage point then to record the highest-ever lead at this level of 1.3 points.

6.4. How has this substantial re-balancing come about? There are two plausible explanations both stemming from the switch to teacher assessment. As we saw in Chapter 5, it brought about a redistribution of grades, away from subjects with right answers, like maths and the physical sciences which are easily encapsulated in written exams towards the more subjective performance and practical subjects, such as music,

drama and physical education which are perhaps better assessed by observing actual performance.

Chart 6.2: Gender Gap at A*



- 6.5. In 2019, just five subjects - maths, further maths, physics, chemistry and economics - contributed two-thirds (65.5%) of the A* awarded to boys, but only 28.5% of those received by girls. Of these five, maths the main contributor and economics had well below-average increases, and physics and chemistry were borderline. In contrast, subjects in which girls were in the majority and/or did better in terms of A* – drama, performing & expressive arts, physical education, classical subjects, ‘other modern languages’ - dominated the major increases. Other subjects, such as psychology, biology and English literature which were especially popular with girls also brought large hauls of A*.
- 6.6. The second possibility is that girls are favoured in teacher assessment. This could be because girls, who tend to apply themselves more consistently than boys, come closer to the teachers’ idea of the good pupil, or because as with modular courses girls’ consistent approach is more suited to the assessment process. In contrast, the ‘big-bang’ approach which tend to be adopted by boys can pay off in the one-off end-of-course examinations.
- 6.7. Whatever the explanation, the landscape changed markedly in 2020/21. It is a moot point whether the rebalancing of grades across subjects led to the changes in the relative performance of the sexes since the subjects to which more girls were attracted increased their top grades more than those where boys are in the majority. Or is it, conversely, that girls came out better in teacher assessment and where there are a lot of them in a subject the rise in grades was above average.

6.8. It is not possible to say, but the results for 2022 should provide some insights. If the return to exams significantly reduces or reverses the gap between boys and girls, then it is likely to have been the different mode of assessment. But if the gap is little changed then it is more likely to be the favouring of girls by teachers. The water in 2022 could, however, be muddied since the curriculum has been narrowed and the exam topics given out in advance, so these exams are likely to reward those who have consistently prepared rather than those who try to get everything in their heads at the last minute. And past experience suggests that it will be girls who apply themselves more consistently.

7. Countries of UK Compared

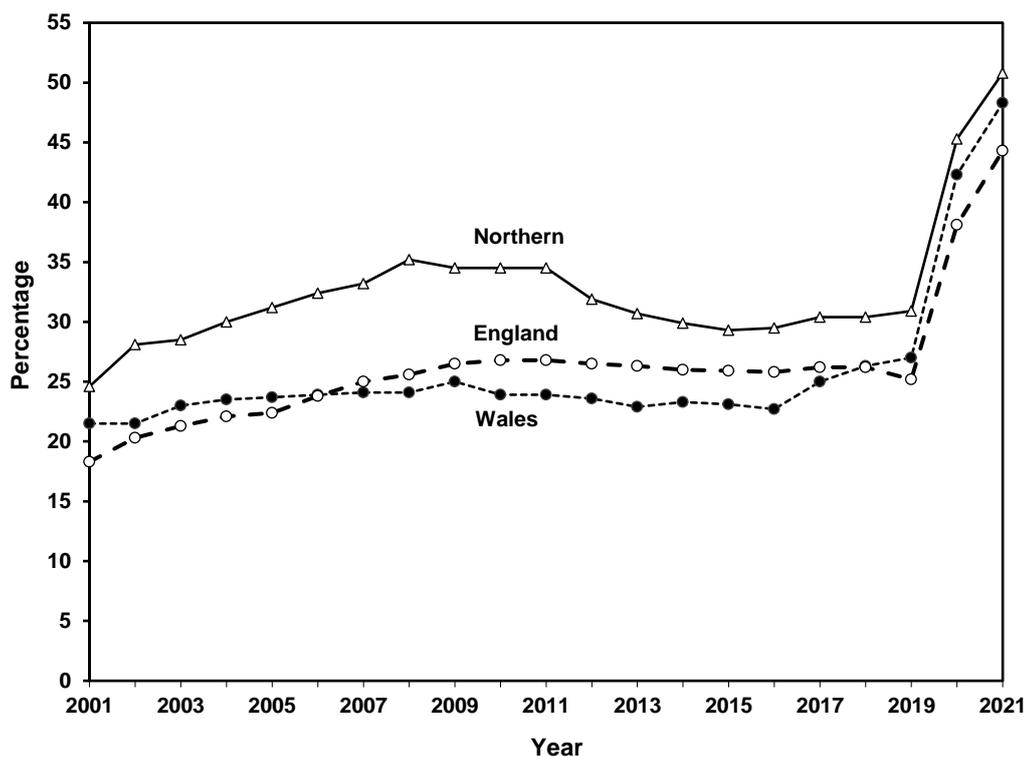
7.1. Although the Covid years have shown an exceptional rise in top grades, Chart 7.1 shows, Wales and also Northern Ireland were even more generous. This was particularly the case A*/A in Wales in 2020 when it registered an increase of 15.3 percentage points compared with 12.9 points in England and 14.4 points in Northern Ireland. It is likely that adding the 2019 AS grade was behind since AS grades have tended to be above A-level grades. It could just be, however, that Wales, which has its own education minister, regulator and exam board, has taken a generally more lenient view.

Chart 7.1: %Change in 2019 to 2021

Grade & Year	England	Wales	NI	UK
A*/A 2021	44.3	48.3	50.8	44.8
A*/A 2019	25.2	27.0	30.9	25.5
Difference	19.1	21.3	19.9	19.3
A*- C 2021	88.2	89.2	94.6	88.5
A*- C 2019	75.5	76.3	84.8	75.8
Difference	11.9	12.7	9.8	12.7

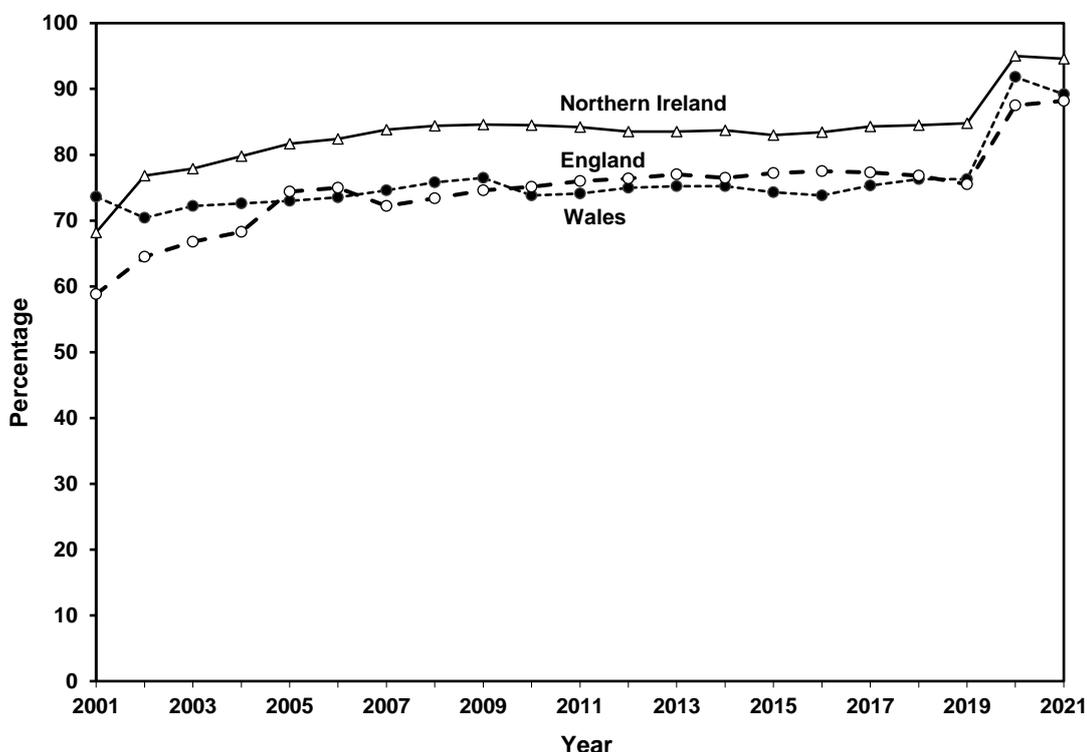
7.2. Charts 7.2 and 7.3 set the 2020 and 2021 grades in the context of the past two decades. In both graphs the eye is drawn to the big leap that the last-minute emergency measures in 2020 led to in all three countries.

Chart 7.2: Trends in A*/A Grades Awarded in UK Countries



7.3. At A*/A Northern Ireland remains ahead, as it always has been, but the teacher assessments in 2020 have resulted in a narrowing of the gap with Wales, but a widening of it from England. At A*-C, as Chart 7.3 shows, both England and Wales draw closer to Northern Ireland, especially Wales which was only just ahead of England in 2019, but in 2020 had opened up a lead of 4.3 percentage points.

Chart 7.3: Trends in A*-C Grades Awarded in UK Countries



7.4. Northern Ireland has always come out best of the home countries at A-level and, indeed, at GCSE and in international comparisons. But there is no generally accepted explanation of why this should be. It may be that its grammar school system has inhibited researchers concerned that finding in favour of such a system would not be a good career move. There are other differences, however, which could account for its pre-eminence. It has its own regulator and exam board (though pupils there also sit the examinations of other UK boards), its own curriculum, its own teaching methods, and perhaps a different appreciation of the value of education. Its success seems often to go under the radar and it deserves more attention both to find out more about what's happening and to see if there are lessons to be learned by the rest of the UK.

8. Prospects for 2022

- 8.1 We already know, before they are published, two things about the 2022 results. First, the Government has asked Ofqual to ensure that the results from the exam boards in England come about half way between those of 2019 and 2021. Secondly, we know whether the trends in subject entry numbers have continued or changed, since Ofqual has already published the provisional figures for 2022.
- 8.2 But this prior knowledge does not mean the 2022 results will be uninteresting. Will Ofqual and the exam boards, for example, actually deliver on the Government's intentions? What will happen to the gap that has opened up in the achievement of girls and boys during the two years of teacher assessment? Will the grade distribution across subjects return to its previous pattern? Are the great strides Wales seems to have made an artefact of the temporary assessment process or will they be sustained?
- 8.3 But first let us look back to see how we came to be where we are. At the beginning of the school year 2020-21, the Government had been determined that examinations should return. Both the Prime Minister and Secretary of State made categorical statements to that effect. But gradually it dawned that this would not be possible. Unlike 2020, however, there was time to develop a more systematic and constrained system of teacher assessment based on, among other things, mock exams, test results and assignments of various kinds.
- 8.4 One might have expected, therefore, that with this more rigorous approach grades would have dropped back to their previous level after the runaway inflation of 2020. But not a bit of it. They did not even stay at the inflated levels, but went up even more. Top grades rose by a further six percentage points, the total for the two years almost doubling the 2019 figure of 25.5 per cent to 49 per cent. The overall pass rate having hovered around 97 per cent for some time finally touched 100 per cent in 2020 and this was sustained in 2021. Teacher assessment had evidently opened the floodgates and the more systematic approach of 2021 had not been able to close them. The paradox of the Covid years is that the least well-prepared sixth-formers of all time have been awarded the highest grades ever.
- 8.5 Now in 2022 exams have at last been possible. But they are not the full-on externally-set and externally-marked unseen papers taken under invigilation. They have had to be adapted to be fair to students whose studies have been disrupted by widely different amounts. To allow for this the syllabuses have been shortened to fit into the time available and candidates have been given advance notice of the topics on which questions were to be asked.
- 8.6 We know what the grades and subject entry figures are likely be, but what of the gender gap, the grade distribution across subjects and the relative performance of the three countries of the UK that take A-levels?
- 8.7 During the two years of teacher assessment, the gap between girls and boys widened appreciably, with girls achieving their largest ever leads at A* and A*/A. Will the return to exams, go some way to restoring pre-pandemic levels when boys were ahead

at A* and there was little difference at A*/A? My feeling is that this is unlikely for at least three reasons.

- The exams in 2022 have been different from the usual run, since allowances have been made for the disruption to studies caused by Covid. In particular the syllabuses have been restricted and advance notice has been given of the topics on which questions have been set.
- The grades will still be above pre-pandemic levels.
- Where previous changes have led to a swing to girls, as with modularisation, their reversal has not always restored the previous pattern of results.

8.8 Teacher assessment was also associated with major shifts in the distribution of top grades across the subjects. Not surprisingly perhaps, the performing arts and practical subjects, such as music, drama, physical education, and design & technology, substantially increased their share, while in the traditional examination subjects, like maths and economics, there were much smaller rises. This will have had a bearing on the relative performance of girls and boys since the erstwhile lead of boys at A* depended on rather few subjects, among which maths and economics were prominent.

8.9 The emergency measures of the Covid years also changed the relative performance of the countries of the UK. Wales awarded proportionally more A*/A and A*-C grades than either England or Northern Ireland, and overtook England, having lagged behind for a decade or more. The rises mainly occurred in 2020 when Wales was able to call on the AS grades of 2019 as another indicator of what the A-level results in 2020 might have been. Since AS grades are generally higher than those of the subsequent A-levels, using them would have another contribution to inflation. So in 2022 will Wales drop behind England once more or will it continue closing the gap on Northern Ireland?

8.10 We know what the intention of the British Government, which is directly responsible for education in England¹⁴ is, but will Ofqual and the exam boards deliver. The exams have been deliberately made easier so the marks are likely to be higher. This means that the grade boundaries may have to be set higher to achieve the results the Government wants.

8.11 If this is indeed the case, and it becomes widely known that the boards have been tough on candidates whose education had suffered so much, it would not be a good-look. A narrative might be developed along the lines of 'Where's the harm? Top grades make pupils, parents and schools feel good? Anyway, more top grades are necessary to feed the ever-expanding university system.

8.12 But inflated grades do considerably reduce the value of A-level exams. They are less precise and accurate and thus convey less information so their fairness in selection is compromised. This leads to universities making more mistakes so that some

¹⁴Education is devolved in Wales, Northern Ireland and Scotland, who have their own regulators and exam boards, though Wales and Northern Ireland which also have as the public examination at the end of secondary schooling tend to work closely together.

candidates will be deprived of their rightful places, while others who cannot cope will be admitted and waste both their time and money.

- 8.13 The inflated grades of 2020 and 2021 has greatly increased the demand for university places, which had left some overspill into 2022 through postponements and deferrals. Competition will be further increased by the number of 18-year-olds rising by a quarter over the next decade with potentially a higher proportion aiming for university. Demand from mature students and international students is also growing.
- 8.14 The likelihood is that competition for the sought-after places will intensify. Meaningful A-level grades become even more important to ensure that places are allocated fairly. The 2022 results will show whether the Government has held its nerve in lowering the grade percentages, if the proportion of A*/A grades is indeed in the region of 35 per cent and A*-C grades come out close to 82 per cent

