Unexplained changes in module-level grades at LSE over time

Background

The Office for Students (OfS) publishes regular reports reviewing unexplained changes in final degree outcomes for Home UK undergraduates. While OfS calls this phenomenon 'grade inflation', it is more accurate to describe it as unexplained changes in grades – in other words, an increase or decrease in the proportion of upper- or first-class grades awarded which cannot be explained by changes in the characteristics of the student population. The implicit assumption by OfS – that institutions are changing the boundaries for attainment and are more generous with degrees over time – is one explanation for patterns of growth in upper- and first-class degrees, but other plausible explanations exist. For example, institutions may improve their teaching and learning such that groups who were disadvantaged in the baseline year become less so over time – or there may be factors in the student population that affect outcomes but which cannot be controlled for within the model.

Despite these limitations, the OfS maintains 'grade inflation' as a strategic priority. Therefore, even though LSE's 'grade inflation' rate is relatively low compared to the rest of the sector, we have attempted to understand more about what might be driving it. In 2019/0 and 2020/1 we published the results of analysis for final degree outcomes, which identified heterogeneity among and within departments.

This analysis goes one step further by looking at unexplained changes in outcomes at the course level. It finds similar patterns to the programme-level analysis – individual courses show fluctuating patterns of change over time, but there is an overall upward trend and a sizeable jump in 2019/0. There is also a clear pattern whereby quantitative courses experience more unexplained changes in upper-class grades, while qualitative courses experience more unexplained changes in first-class grades.

Key findings

Unexplained changes in grades exist at the course level as well as the final degree classification

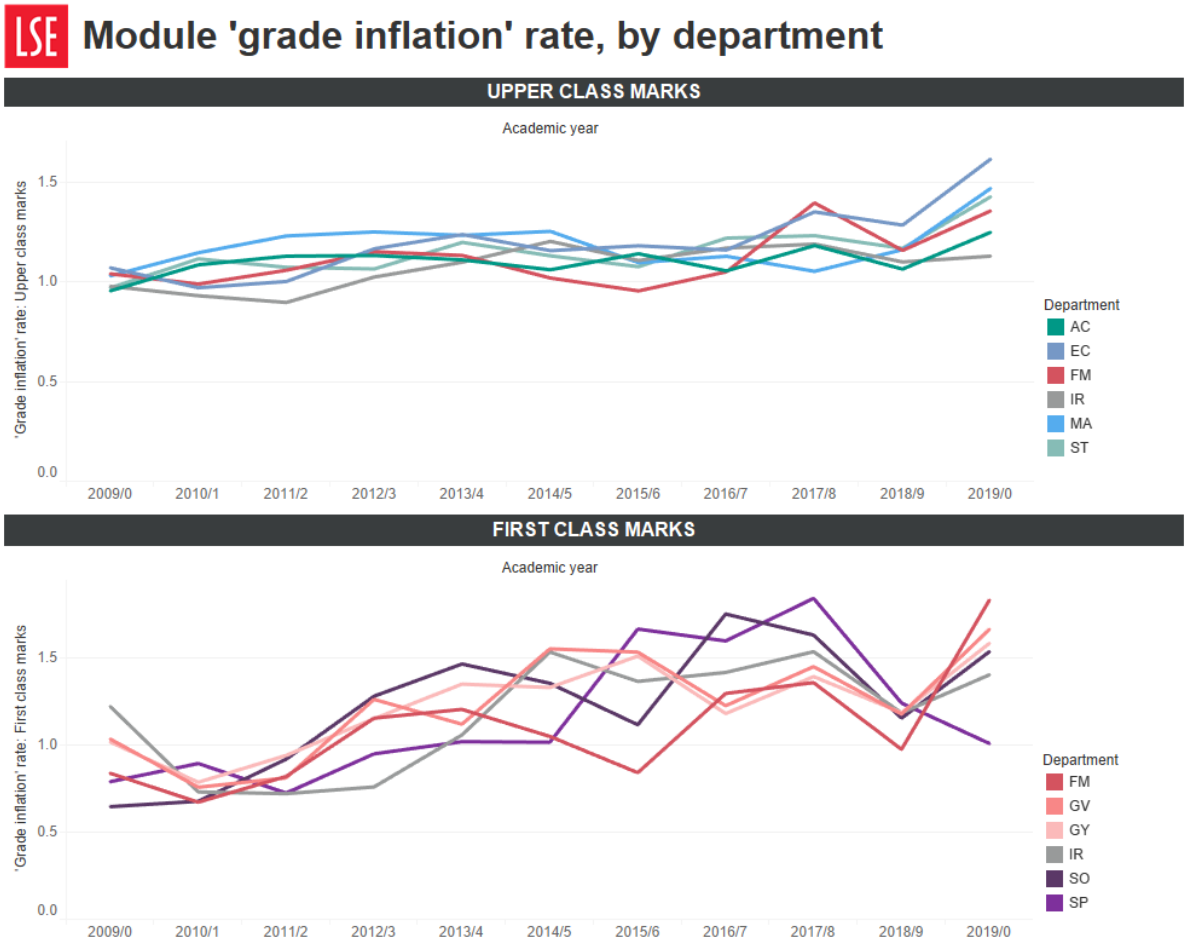
This analysis showed that the unexplained changes in outcomes, identified in previous work at the programme level, also exist at the course level across all years of undergraduate study at LSE. Individual courses are subject to large fluctuations in year-on-year outcomes, but some show patterns of higher awarding rates at both upper- and first-class level, which are not explained by changes in the student population. Note, though, that small student counts on some courses will lead to extreme levels of unexplained change in outcomes (both increases and decreases in the proportion of grades awarded).

Upper class grades increased more in quantitative departments, while first-class grades increased more in qualitative departments

We aggregated the unexplained changes in outcomes across all courses within a department to find the departments with the greatest increase in changes at both upper- and first-class level. This

analysis showed that five of the top six departments for an unexplained increase in upper-class grades were quantitative. And five of the top six departments for an unexplained increase in first-class grades were qualitative. Finance is the only department to appear in the top six for both upper- and first-class grades.

Moreover, aggregating all course results in quantitative and in qualitative departments showed very similar patterns. Unexplained changes in outcomes at upper-class level was generally higher in quantitative courses, with a very big increase in the rate during 2019/0. At the first-class level, the biggest unexplained increase occurred in qualitative courses over the most recent 6 years.



2019/0 was an atypical year for unexplained changes in outcomes, possibly due to COVID-19

Looking at individual courses, courses in departments, and courses within the qualitative/quantitative split we saw varying levels of heterogeneity within the rate of unexplained changes in outcomes – but in 2019/0 the pattern is much clearer, with nearly every course, department and discipline experiencing a big increase in unexplained changes in outcomes. This is likely due to some combination of the changes to teaching and assessment that began in March 2020 due to the COVID-19 pandemic – but more research would be needed to understand the exact causal mechanisms.

Some unexplained changes in outcomes may be due to improvements in teaching and learning for sub-groups within LSE's Home UK undergraduate population.

The original OfS model takes the impact of demographic characteristics in the baseline year and uses these as predictors for all subsequent years – meaning the model implicitly assumes that the effect of being from a certain group (e.g. Asian ethnic background, mental health difficulty) remains consistent over the entire ten year period. To test this assumption in their most recent study, OfS introduced a new 'hypothetical' group of students who possessed the most advantageous combination of characteristics in the baseline year, and calculated the rate of unexplained change in outcomes for this hypothetical group.

We repeated this approach for the course-level result and found that it reduced the unexplained changes in outcomes by about 0.2 units. This meant that in many years the rate of change for unexplained changes in outcomes remained relatively steady and, in fact, in many cases dipped below 1 – although a sharp rise was still observed in 2019/0. This suggests that improvements to LSE's teaching, learning and assessment practices over the ten year period may have improved outcomes for students who were, in the baseline year, relatively disadvantaged.

Recommendations

At present this analysis does not present any School-wide cause for concern. The patterns are in line with observations at the programme level, and the increased rate of unexplained change in outcomes in 2019/0 is likely due to COVID-19.

Therefore we recommend that LSE:

- Repeat the analysis for 2020/1 and 2021/2 courses and programmes. We would expect the rate of unexplained change in outcomes to return to a pre-COVID trajectory during the 2021/2 academic year (assuming that teaching and assessment progress as currently planned) – if this is not the case then remedial action may be necessary.
- Repeat the 'hypothetical' group analysis at programme level to understand whether this reduces the rate of unexplained change in outcomes in the same way as it does at module level.