Bar, Kadiyali, and Zussman, “Grade Information and Grade Inflation”

Cornell’s experiment: provide online info on median grade in all courses
   faculty committee report suggested:
   • getting a B- in a course in which the median is C+ may actually indicate good
     performance (vs. a B+ in a course in which the median is an A);
   • “more accurate recognition of performance may encourage students to take courses
     in which the median grade is relatively low.” (!!!)

Bar et al. have rival hypotheses: ceteris paribus...
   • online grade info will lead to increased enrollment in leniently-graded courses
   • high-ability students will be less attracted to leniently-graded courses than others

Initial findings:
   • students knew about the online info, and used it, esp. during course registration
   • mean grade in College of Arts and Sciences went on rising after the experiment
   • share of enrollment in previously low-grading courses fell
regression analyses of course enrollments:
dependent variable is % of all students who are enrolled in a given course
(each observation is a course; standard errors in parentheses)

<table>
<thead>
<tr>
<th>Interaction</th>
<th>all</th>
<th>advanced</th>
<th>annual</th>
<th>advanced</th>
<th>annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-policy-period</td>
<td>0.014</td>
<td>0.014</td>
<td>0.029</td>
<td>0.020</td>
<td></td>
</tr>
<tr>
<td>median grade × dummy for “policy period”</td>
<td>(0.010)</td>
<td>(0.003)</td>
<td>(0.029)</td>
<td>(0.020)</td>
<td></td>
</tr>
</tbody>
</table>

Semester fixed effects included
Course fixed effects included
are high-ability students less sensitive to grades?

dependent variable = % of students in a course who are “high-ability”
(each observation is a course; standard errors in parentheses)

<table>
<thead>
<tr>
<th>“high ability” defined as...</th>
<th>top 40%</th>
<th>top 30%</th>
<th>top 20%</th>
<th>top 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged median grade</td>
<td>-2.531</td>
<td>-2.396</td>
<td>-3.192</td>
<td>-1.382</td>
</tr>
<tr>
<td></td>
<td>(1.454)</td>
<td>(1.314)</td>
<td>(1.253)</td>
<td>(1.021)</td>
</tr>
</tbody>
</table>

Regressions include fixed effects for semester and course.
“High ability” is defined by location of students in the SAT distribution.

Thus, a higher course grade is associated with lower enrollment of “high ability” students.
So these results are concerned mainly with “compositional” grade inflation
(a shift, over time, towards high-grading departments)

General level of grades increased faster after the policy change
So what explains the faster “classic” grade inflation? (i.e., general rise in all grades)

* Share of non-tenure-track and untenured faculty has gone up over time;
  these faculty are more inclined to grade leniently
  (BUT, at Cornell, no change in the importance of these faculty)

* Improvement in student quality?
  (SAT scores did actually go up over time at Cornell)

* Professors responded to the policy change by making their grading more attractive
to students? (not much evidence of this)