Unpaid Lunch Debt in Durham, NC

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Introduction

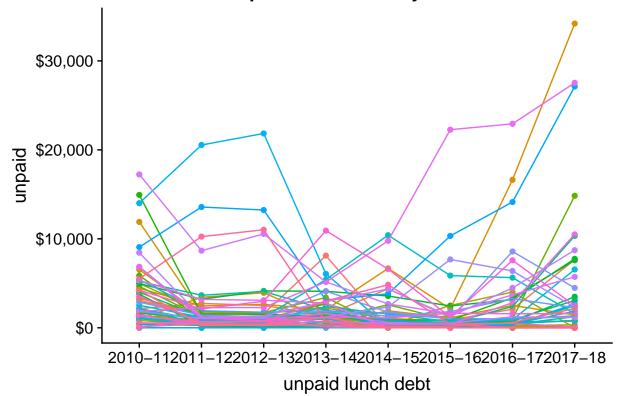
When families can't afford to pay for student lunches, school districts foot the bill. But with major cuts to educational funding in North Carolina—where some schools don't even have enough funds to pay for students' textbooks—this means school districts can wrack up tens of thousands of dollars in debt. In Durham, students with five or more unpaid lunches only receive a juice and a sandwich instead of a hot lunch. This lends its way to "lunch shaming", where students who can't afford pay skip the meal altogether to avoid the embarrassment of eating a cold lunch. This is a major issue, since student performance in school is directly tied to access to quality food.

Data Sources

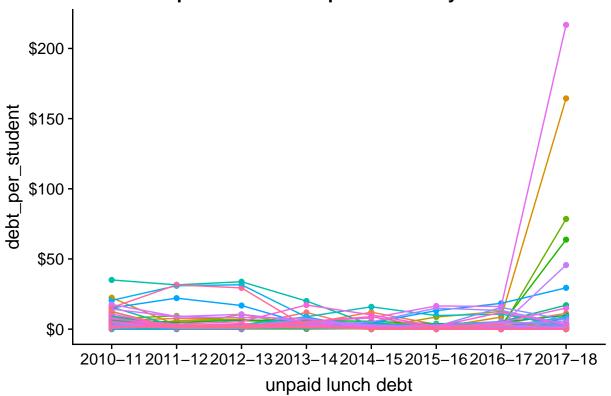
- End-of-Year unpaid meal data from James Keaton, director of child nutrition services at DPS.
- All free/reduced price lunch data was obtained from ncpublicschools.org
- 2010-11 through 2015-16 demographic data was obtained from the NCES ELSI table generator, code 91803
- 2017-18 ADM data from ncpublicschools.org's Average Daily Membership and Membership Last Day by School

EDA

Unpaid Lunch Debt by School

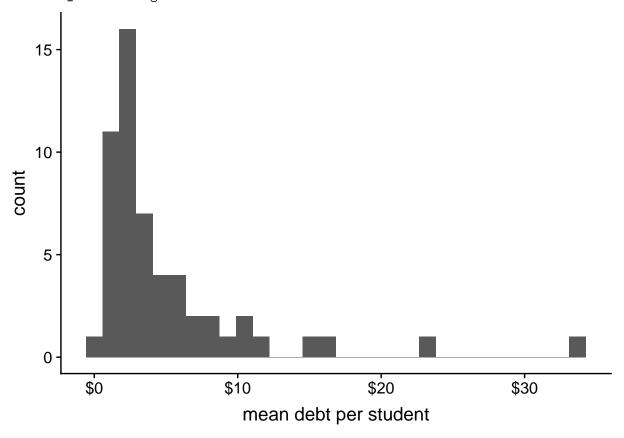


Unpaid Lunch Debt per Student by School

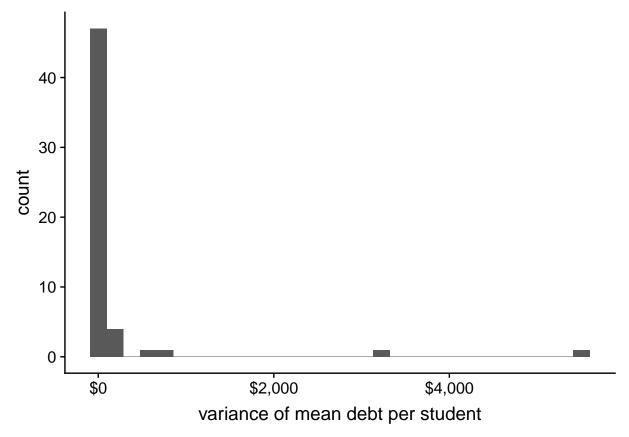


When we look at total unpaid lunch debt as well as per student, we see a lot of variation. Let's try to find which schools fluctuate most when it comes to school lunch debt.

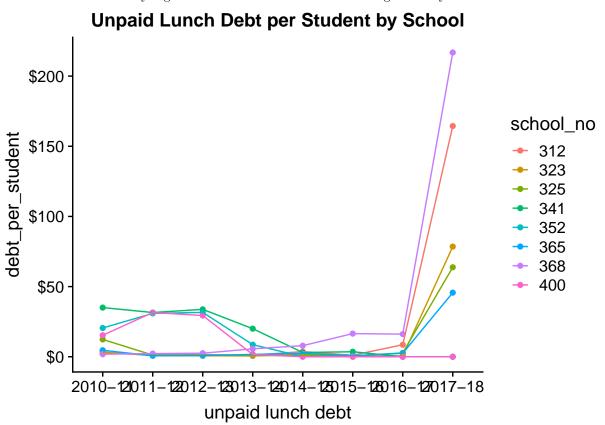
`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.



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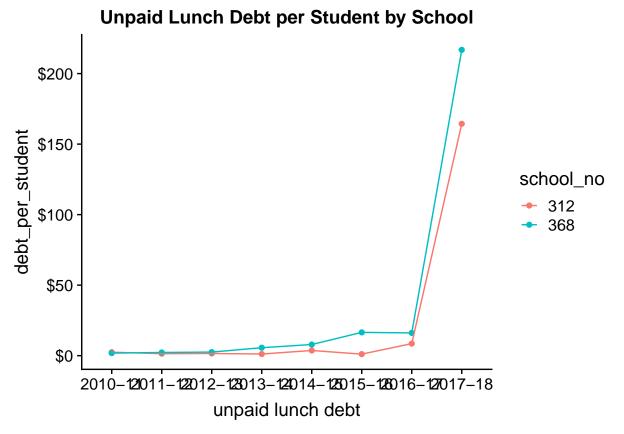


Some schools have really high variance. Let's check those out longitudinally.



This is pretty weird. Could it be something to do with the dataset?

Let's also look at schools with outlier values for mean debt.



- $\bullet\,$ get 2010-11, 2011-12, 2012-13, 2013-14 and 2017-18 CEP data.
- get demographic data for 2016-17 and 2017-18 academic years
- double check datasets for conflicting ADM/counts
- think through when data is being pulled
- external factors (paying off debt, CEP status)
- how to track people paying off debt/dates?
- think about fairly comparing schools
- LONG TERM: can a student graduate with debt? are they barred from anything? what are consequences besides food?