

Who Enters Teaching? Encouraging Evidence that the Status of Teaching is Improving

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Perceptions of the teaching profession

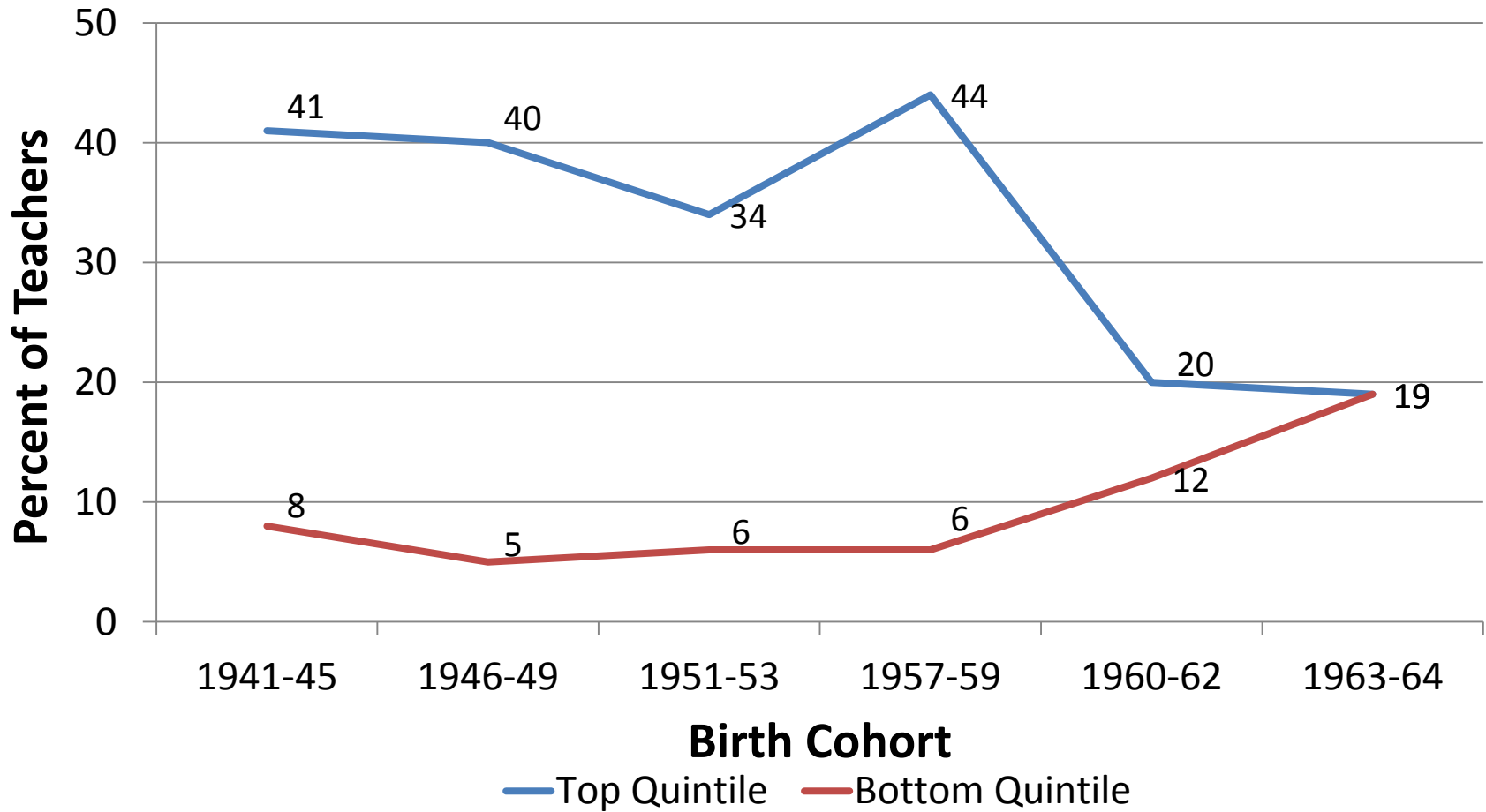
“He who can, does. He who cannot, teaches.”

--George Bernard Shaw (1903)

“Demeaning teachers ... foster[s] a diminished valuation of education as a whole, and ensure that smart, talented college grads will look to use their skills elsewhere.”

--Illana Garon (2014) in Ed Week

Trends in teacher academic ability (IQ/AFQT) (Bacolod, 2007)



Prior research

Teachers with higher SAT/ACT scores less likely to enter teaching

- Manski, 1985; Hanushek and Pace, 1996; Vegas, Murnane and Willett, 2001

Teacher academic ability decreased from 1960s to 1990s

- Bacolod, 2007; Corcoran, Evans, & Schwab, 2004; Podgursky, Monroe & Watson, 2004

The decrease was partially driven by changes in the labor market for women

- Bacolod, 2007; Hoxby & Leigh, 2004

Status of the teaching profession

Many see this as evidence of the relatively low status of teaching

Many proposals for how to improve the status of the profession

- Compensation and working conditions
 - Firestone & Bader, 1992; Odden & Kelley, 2001
- Distribution of power, authority, and control over curriculum, evaluation, and budgets
 - Ingersoll, 2003
- Licensing and training of teachers
 - Darling-Hammond, Wise, & Klein, 1999

More recent evidence suggests the negative trend has flattened or even reversed in the late 2000s

- Goldhaber & Walch, 2013

Motivation

A lot has happened in the 2000s that could shape the teacher labor market

- Ratcheting up teacher certification requirements
- Expansion of alternative pathways into teaching
- Nation-wide implementation of accountability and the Highly Qualified Teacher (HQT) provisions of NCLB

Differing points of view re: impact of policies

- Pro: emphasize teaching requires specialized knowledge skills
- Con: increase barriers to entry, blaming teachers

Provide suggestive evidence re: impact of policies

- Prior work often constrained by data limitations
- We describe trends in teacher academic ability using a rich data set on all teachers in New York public schools between 1986 to 2010

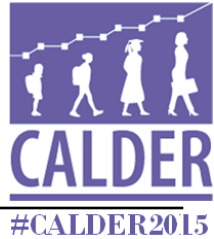
Research questions

How has the academic ability of entering teachers in New York changed over the last 25 years?

Are the improvements widespread throughout or narrowly concentrated within the state?

Is there heterogeneity in any aggregate findings across labor markets, subjects, or school characteristics?

Background of teacher policy in New York



Timeline	Policy Event
7/1998	NYS Board of Regents enacted a new teaching policy, <i>Teaching to Higher Standards: New York's Commitment</i> .
7/2000	New York Board of Regents approves the first alternative teacher certification program.
12/2001	All teacher education programs reviewed and reregistered.
9/2003	Temporary teaching licenses eliminated except under extraordinary circumstances.
2/2004	First- and second-stage licenses renamed and given new requirements.
9/2005	Federal Highly Qualified Teacher (HQT) requirement takes effect.
12/2006	All preparation programs required to be accredited by NCATE, TEAC, or the Regents.

Data and methods

SAT scores for all NYS public HS test-takers between 1980 & 2008

- We standardize SAT scores by year of test administration

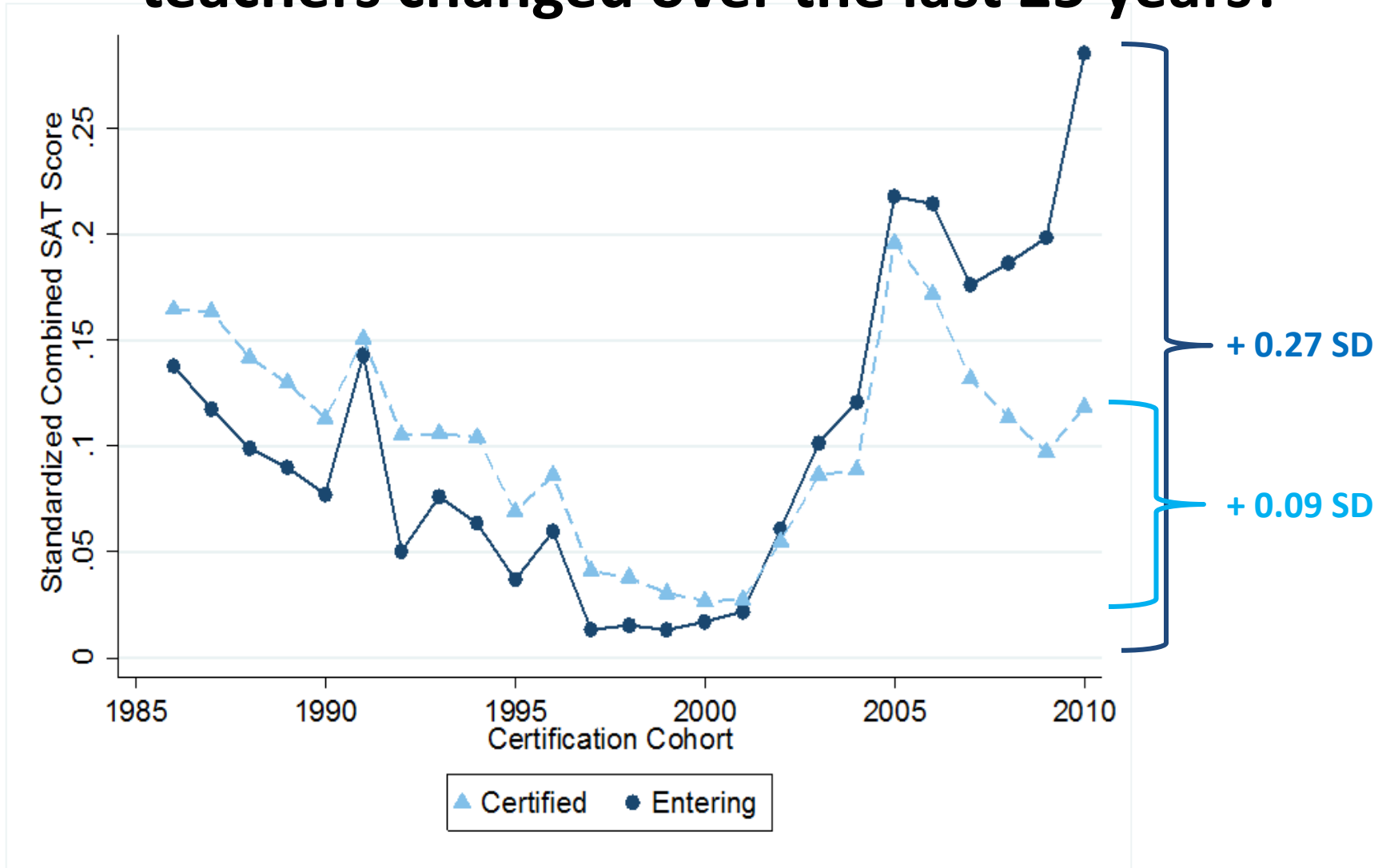
Link scores to the NY certification and placement files

- Initially certified persons (n = 220,332)
 - First certification received was Provisional/Initial, Transitional (alt.), emergency/temporary
- Initially hired teachers – “entering teachers” (n = 151,747)
 - Initially certified persons plus any first-year teachers not observed in certification data (2.7% of placed teachers)

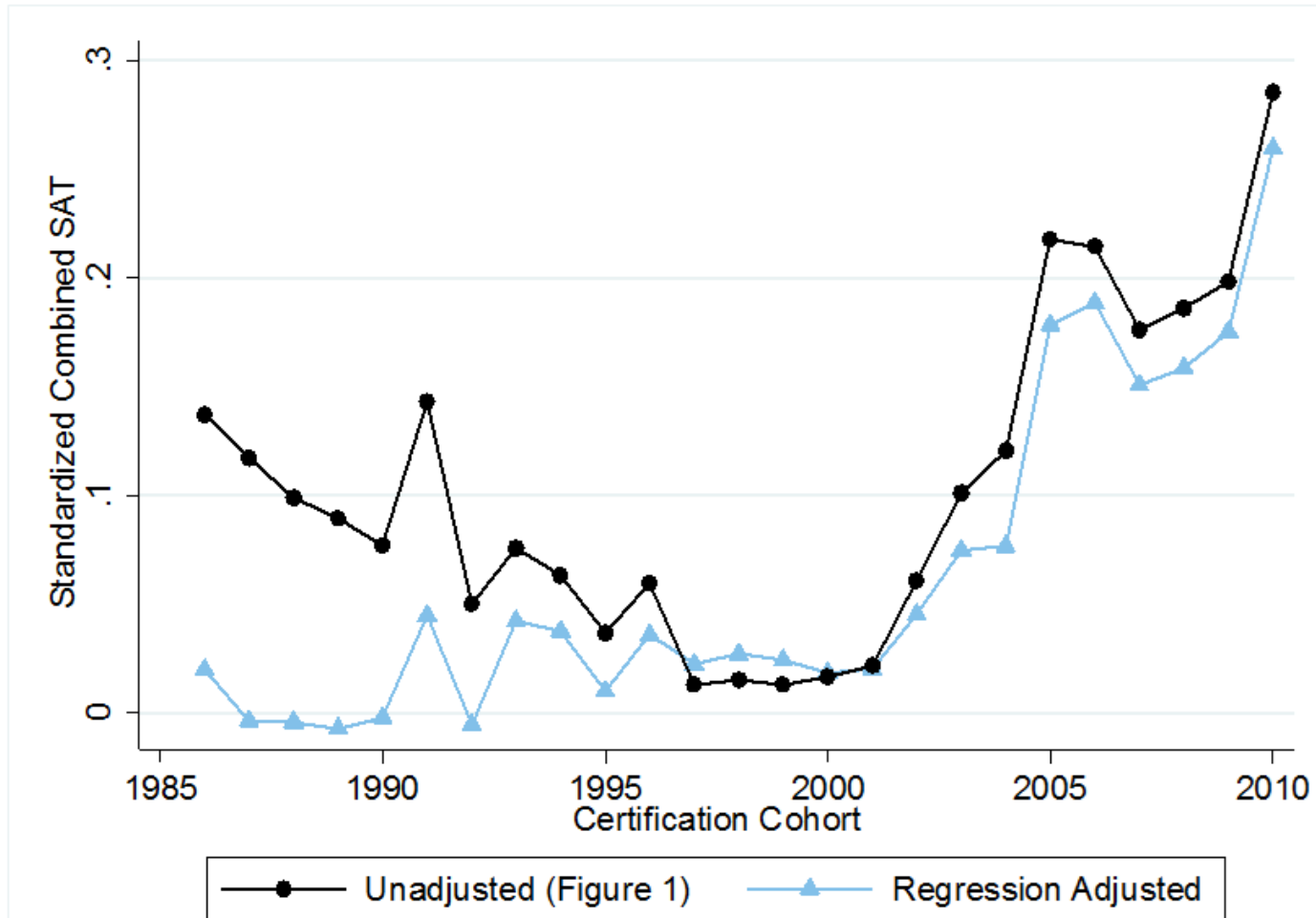
Organized individuals into certification cohorts based on the year they received their initial certification

- Typically have SAT scores for more than 50 percent of a cohort
- Sensitivity checks suggest we are underestimating trends

How has the academic ability of entering teachers changed over the last 25 years?

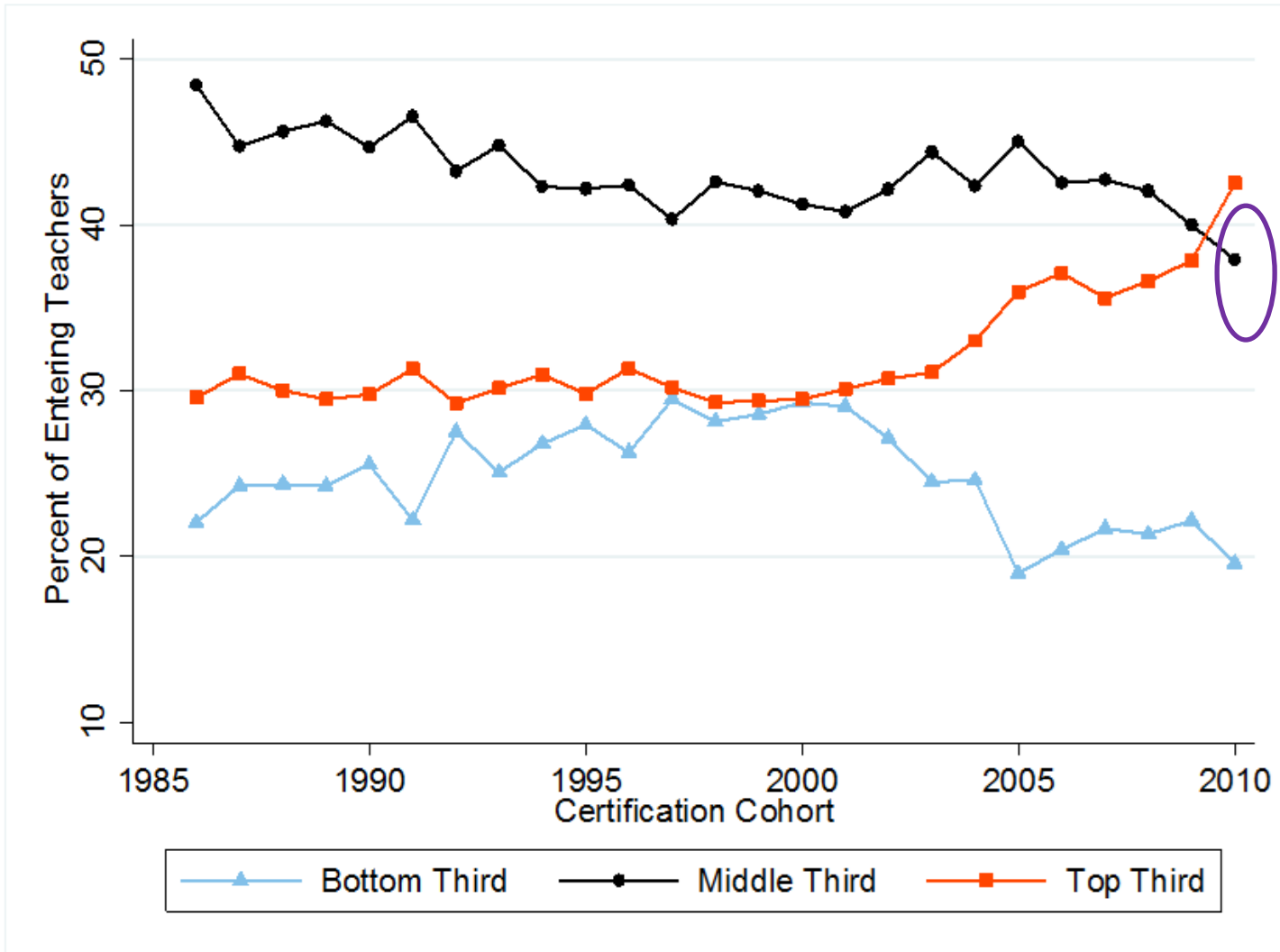


Increased academic abilities of entering teachers **Not** **Driven** by labor market dynamics



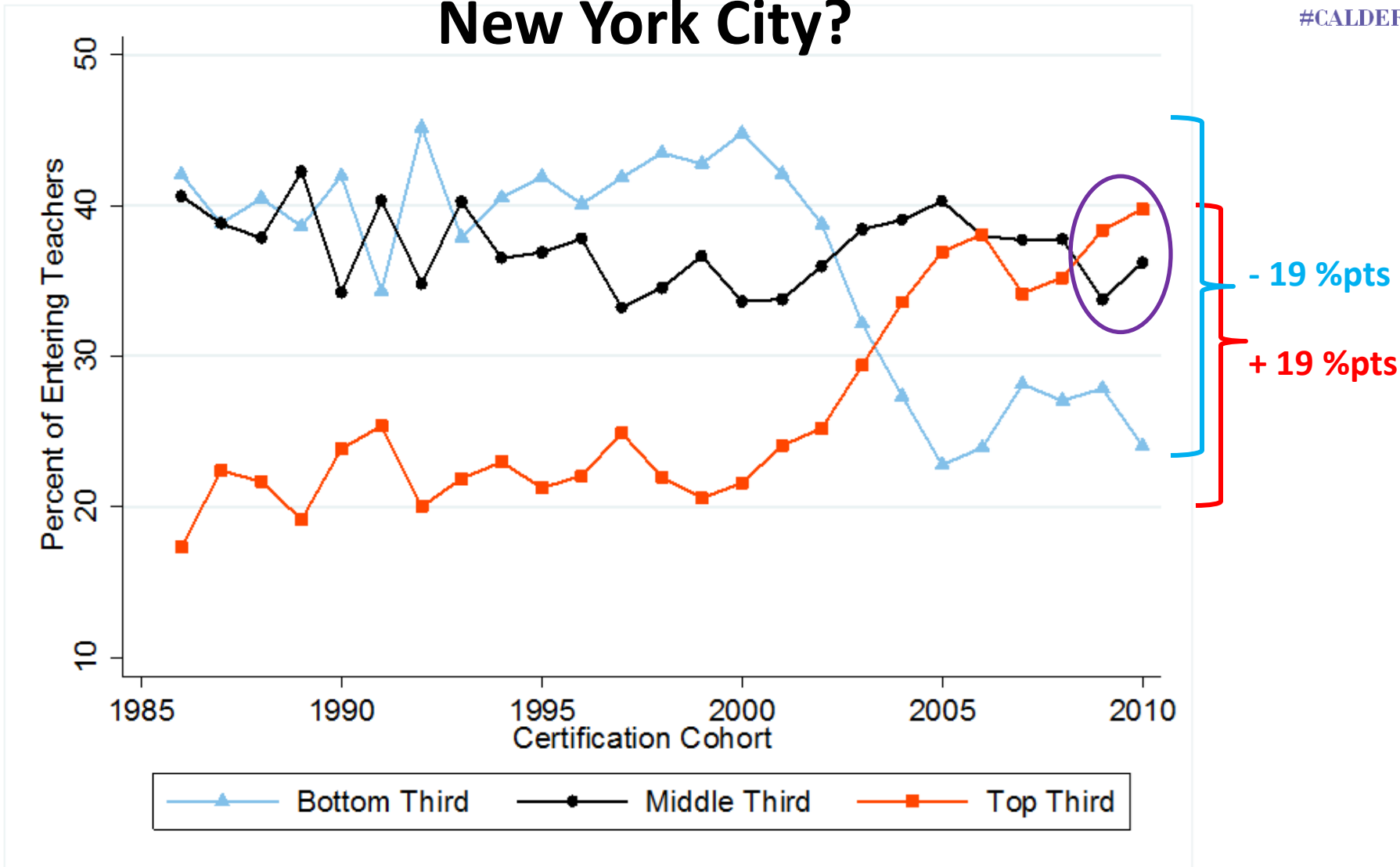
Controls: district enrollment, percentages of teachers by race/ethnicity, starting salaries, number of inexperienced and experienced teachers hired, district fixed effects

How has the academic ability of entering teachers changed over the last 25 years?

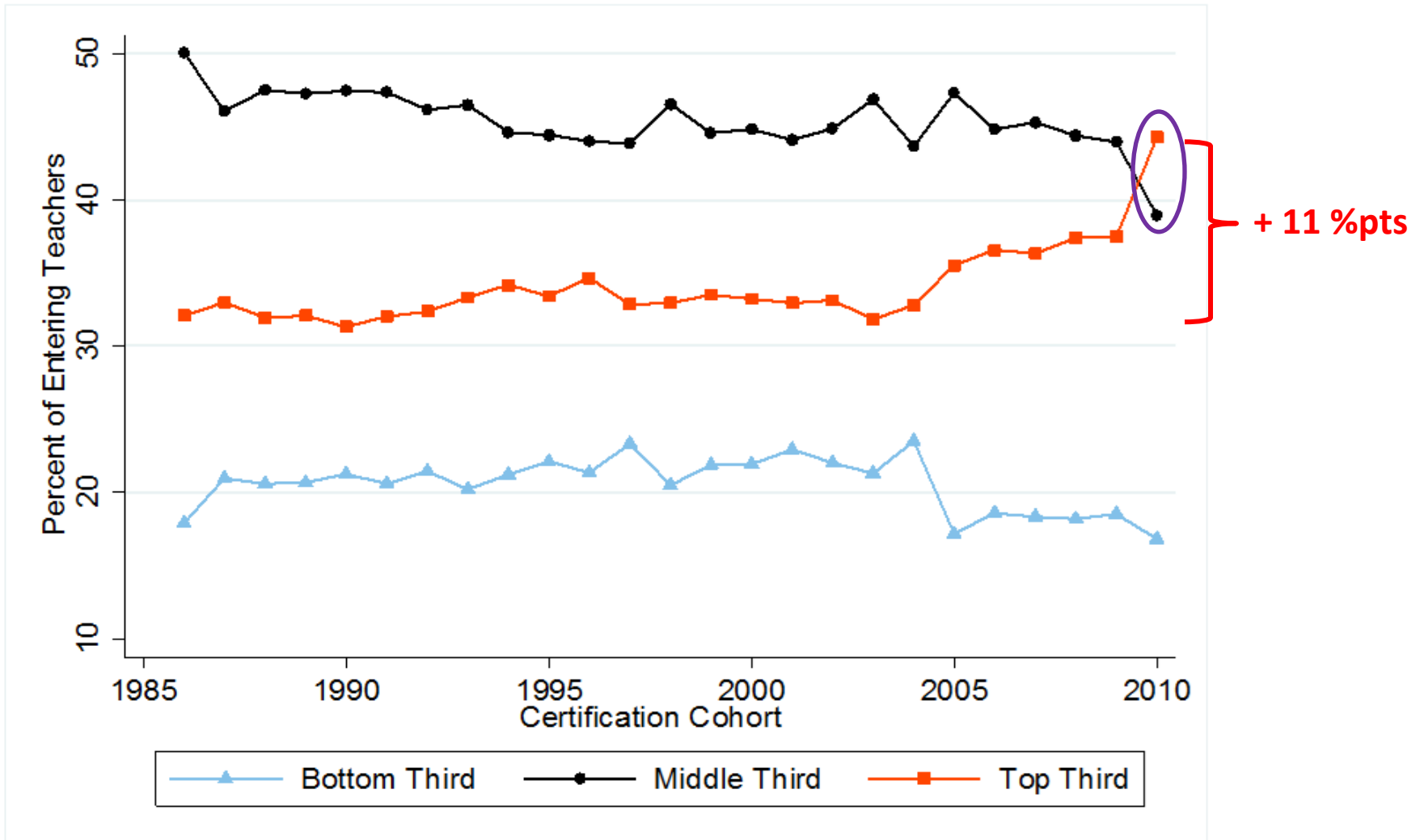


Modal teacher scored in the top third of the SAT distribution in 2010

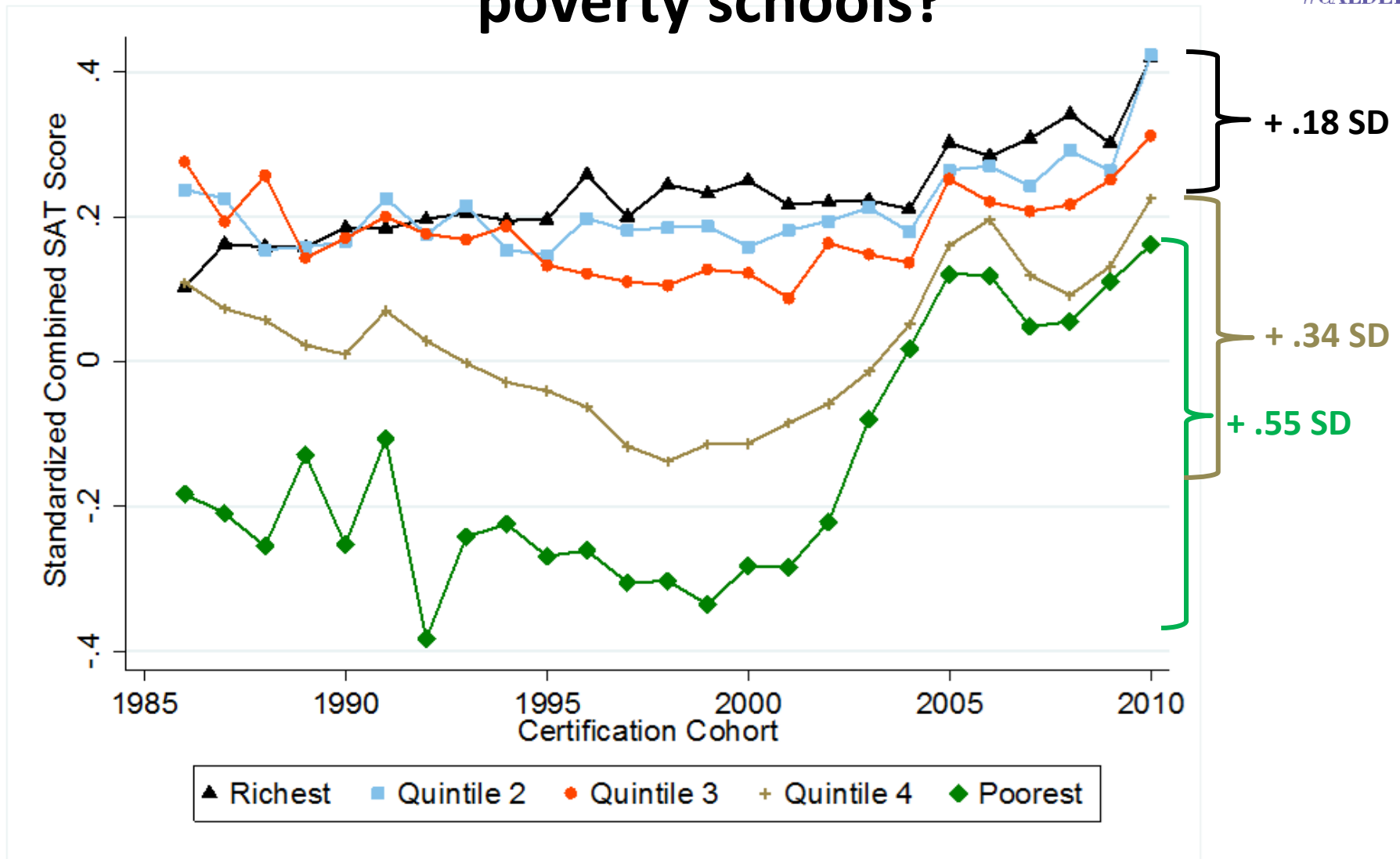
How has teacher academic ability changed in New York City?



...And the rest of the state?



How has it changed for low- versus high-poverty schools?



Other findings

College competitiveness (most comp, comp, less comp, not)

- 1999 to 2005: most comp + 3.6 %pts, comp + 3.1 %pts
- Academic ability increased in all four categories

Grade and subject

- Larger gains among hard-to-staff subject teachers (math, science, special ed, bilingual) than elementary or other subject teachers

Geographic location (non-NYC city, suburban, town, and rural)

- Increase between 14 and 29 percent of a SD between 1999 & 2010

Not simply a TFA/alternative certification effect

- Graduates of traditional preparation programs: increased 17 percent of a SD between 1999 and 2010 after declining 9 percent between 1986 and 1999

Sensitivity analyses suggest improvement is underestimated

Excluded groups: (1) NYS private HS test-takers, (2) out-of-state test-takers, and (3) non test-takers

- Restrict sample to SAT test-takers between 1980 and 2001
 - 16% entering teachers graduated from a NYS private HS
 - Academic ability decreased an additional 3% of SD by 1999 then increases an additional 0.5% of SD by 2006
- College competitiveness: strongly correlated with academic ability
 - Observe for 88% of all entering teachers and 85% of entering teachers without SAT score
 - Compare trends between those with and without SAT
 - 4 levels: Very competitive, competitive, less competitive, not competitive
 - Trends very similar through 2002
 - After 2002, no-SAT entering teachers graduate from more selective colleges than those with observed SAT scores

Summary

The trends in teacher academic ability within New York show encouraging results:

- Modal teacher in NY now comes from the top third of the SAT distribution
- Encouraging trends are not isolated to New York City
- Poorest schools experience the largest increase in teacher academic ability
- The positive trends are larger for Middle and High schools

Improvements consistent with policy changes intended to improve teacher quality

Suggests the status of teaching is improving at least among those selecting careers