

RESEARCH BRIEF: The Effect of QTEA’s Compensation Changes on Teacher Recruitment

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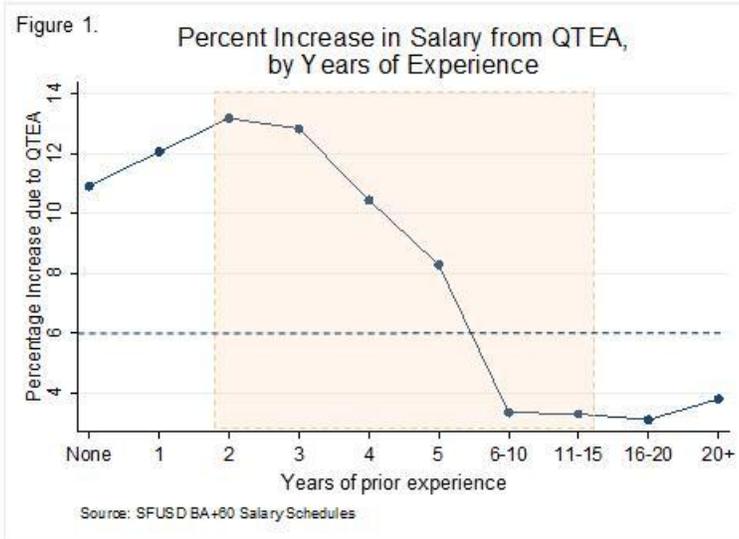
BACKGROUND:

In 2008, San Francisco voters passed The Quality Teacher and Education Act (QTEA, or Proposition A), which significantly changed teacher compensation, accountability and support in the school district (SFUSD).¹

- Over 40% of QTEA’s funds annually go toward changes to the teacher salary schedule.
- **Part of the district’s motivation for raising salaries was to attract teachers who would only have applied to higher-paying school districts before the increase.**
- **QTEA implementation corresponded with a downturn in the economy.** QTEA was first implemented in the 2008-09 school year; in this year, unemployment rates in the Bay Area went from 5.6% to 9.6%.

METHODS:

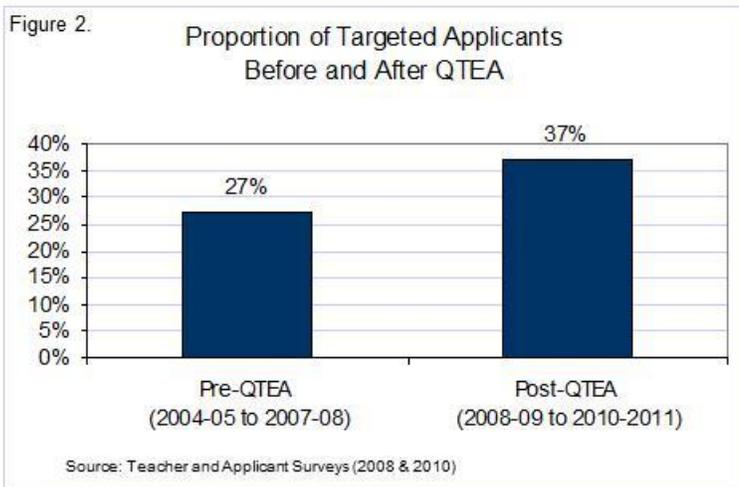
- **I use variation in the distribution of salary increases in QTEA to separate the effect of the policy from the effect of economic changes.** As shown in Figure 1, applicants with 5 or fewer years of prior experience



received greater salary increases under QTEA. For example, on the BA + 60 salary schedule, those with 4 years of prior experience received more than a 10% increase, while those with 7 years of experience received much less.

- **I exclude from my analysis applicants with fewer than 2 years of prior experience or more than 15.** This is because applicants with no prior years of experience and those with many years of experience may differ from mid-experience applicants. For example, older teachers’ retirement choices could be impacted by economic downturns, and un-tenured teachers could have been laid off from their prior position.
- **I call applicants for whom the policy had a large effect (i.e., a 6% or greater salary increase), “targeted” applicants.** I am able to estimate the effect of QTEA on teacher recruitment by comparing changes over time for teachers who gained a lot from QTEA, or the “targeted teachers,” to those who did not. This allows me to compare teachers before and after QTEA who are similarly affected by the economy but differently affected by the policy.
- To study the effect of QTEA on the applicant pool, I combined surveys from applicants and teachers in 2008 and 2010 to build a dataset representing applicant cohorts from 2004-05 to 2010-11 (N = 1,611, representing 6,767).

¹ The research presented in this brief is part of a comprehensive evaluation. For full reports on the study of QTEA, see <http://cepa.stanford.edu/qtea/publications>

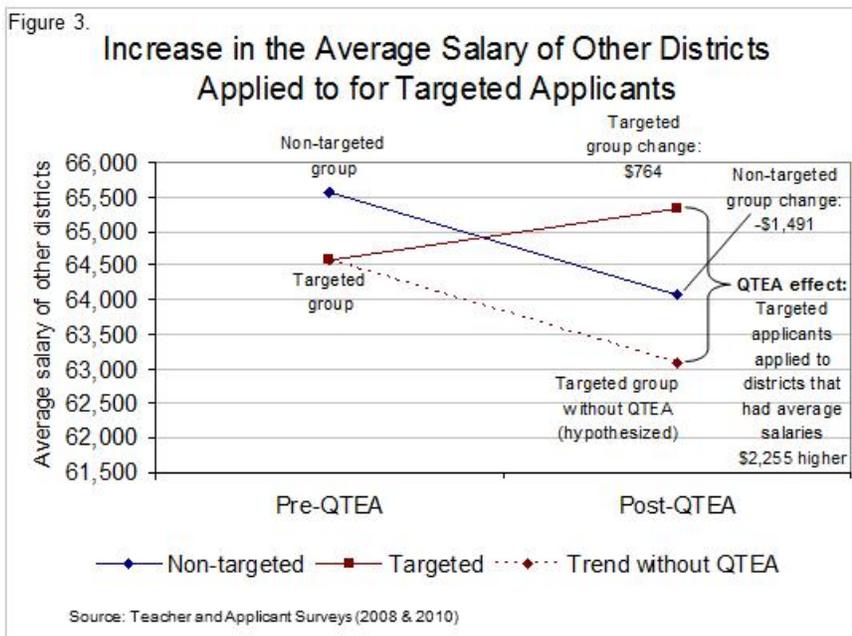


ANALYSIS #1: Did QTEA attract more applicants who were “targeted” by the policy?

- Because targeted and non-targeted applicants differed only in how they were affected by the policy, if the proportion of targeted applicants increased relative to non-targeted applicants, we assume that these applicants were drawn to the district by the QTEA salary increases.
- As shown in Figure 2 to the left, **before QTEA, 27% of the applicants were in this targeted group, whereas after QTEA, 37% of the applicants were in the targeted group.**

ANALYSIS #2: Were these “targeted” applicants pulled from higher-paying school districts?

- An increase in the average salary of other districts applied to by the targeted group after QTEA would show that these applicants included SFUSD in their job search *because* they prefer districts with higher salaries and now consider SFUSD to be more competitive with higher-paying school districts.
- To answer this question, I compare the average salary of the other districts applied to (in addition to



SFUSD) for cohorts before and after QTEA. To separate the effect of QTEA from the effect of the economy, I take the difference in the average salaries of other districts applied to for targeted applicants before and after QTEA, and compare this to the difference in the average salaries of other districts applied to for non-targeted applicants before and after QTEA. This approach is called *difference-in-differences*.

- As shown in Figure 3, for the non-targeted group, the average salary of other districts applied

to *decreased* after QTEA, likely due to the downturn in the economy. The targeted group applied to lower salary districts than the non-targeted group before QTEA; probably because they have slightly fewer years of teaching experience. However, for the targeted group, the average salary of other districts applicants applied to *increased* after QTEA. The true “QTEA effect” is the difference between the targeted group’s actual average salary and the hypothesized outcome if QTEA had not been implemented. **Thus, for targeted teachers, the average salaries of other districts applied to were \$2,255 higher than they would have been in the absence of QTEA.**

CONCLUSIONS:

- **These results show that QTEA was effective in recruiting more applicants, and that the new teachers in the applicant pool were drawn by the higher-salary.**