# Primary School Funding

While listening to the article, I was not particularly shocked at the dynamics of relatively high education spending while also having relatively little to show for it (in the form of amenities for students). The costs of operating a school and paying for teachers is extremely high, especially in the modern era due to the abundance of outside options that educated women have in the labor market. While the Roy model would predict that the higher earnings for college-educated women in outside options would result in lower teacher wages/skill, but there are likely countervailing forces at play that bring the compensation of teachers in relative alignment with the compensation of other college-educated professions, such as increased labor market competition. The result of school funding being relatively confined to the basics of running the school mean that it's likely that fewer field trips/extracurricular activities are funded as the cost of teacher labor and school maintenance increase.
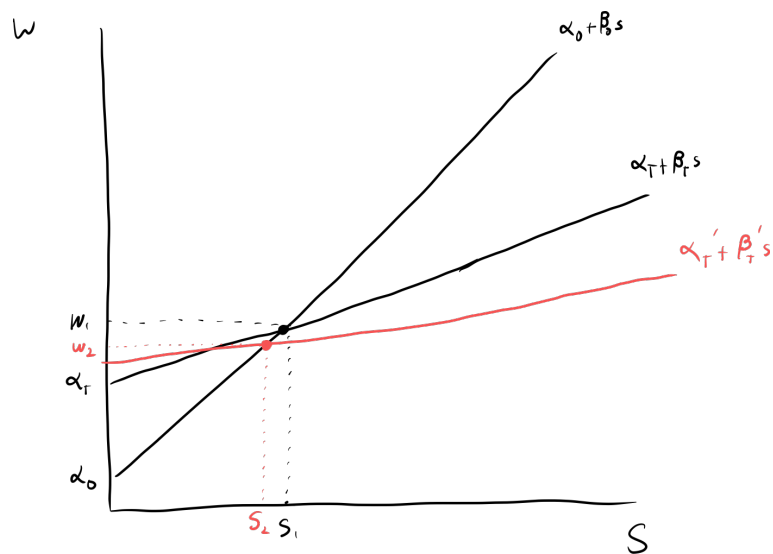
Student Accountability

Teacher Labor Markets

(a) We see that teacher wage and skill level rise as a result of a higher α_T.
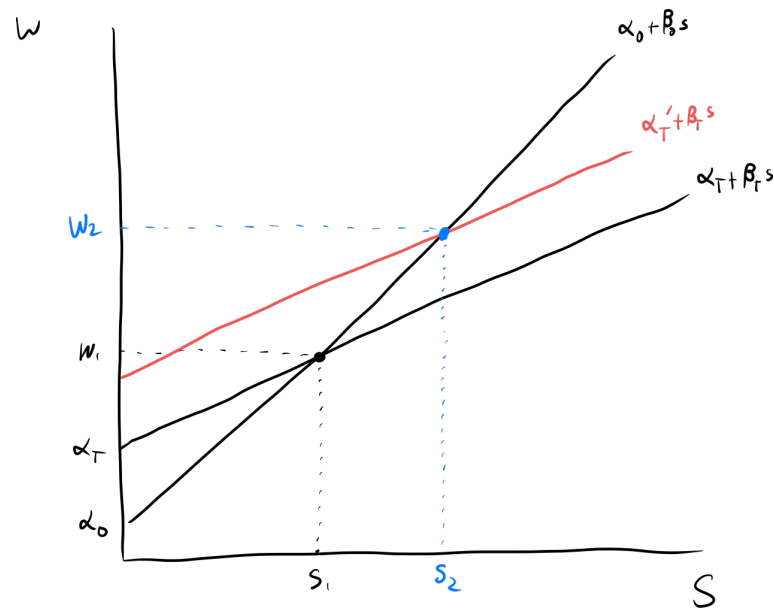
(b) The duty-to-bargain provisions yield lower returns to skill and a flatter wage structure, meaning that the direction of skill and wage changes are ambiguous (in this case, we have drawn a reduction in skill and wage)

(c) The accountability system increases return to skill, reducing α_T and increasing β_T.
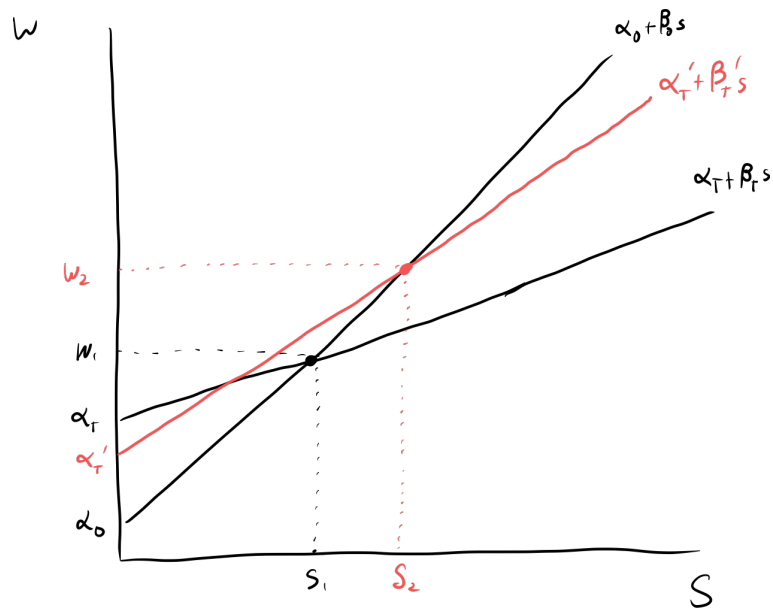
(d) The crash in the stock market reduces the returns to skill and the endowment in outside options, meaning that the skill and wage of teachers increases.

w

$\alpha_0 + \beta_0 s$

$\alpha_0' + \beta_0' s$

$\alpha_T + \beta_r s$

w_2

w_1

α_r

α_0

S_1 S_2 S
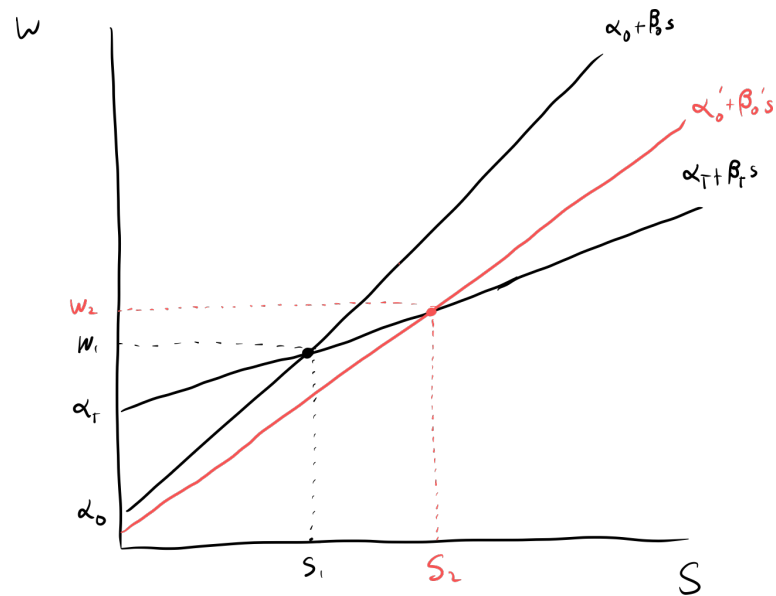
(e) Teach for America increases the return to skill for teachers, leading to higher skill and wage levels.

w

$\alpha_0 + \beta_0 s$

$\alpha_T' + \beta_r' s$

$\alpha_T + \beta_r s$

w_2

w_1

α_r

α_0

S_1 S_2 S
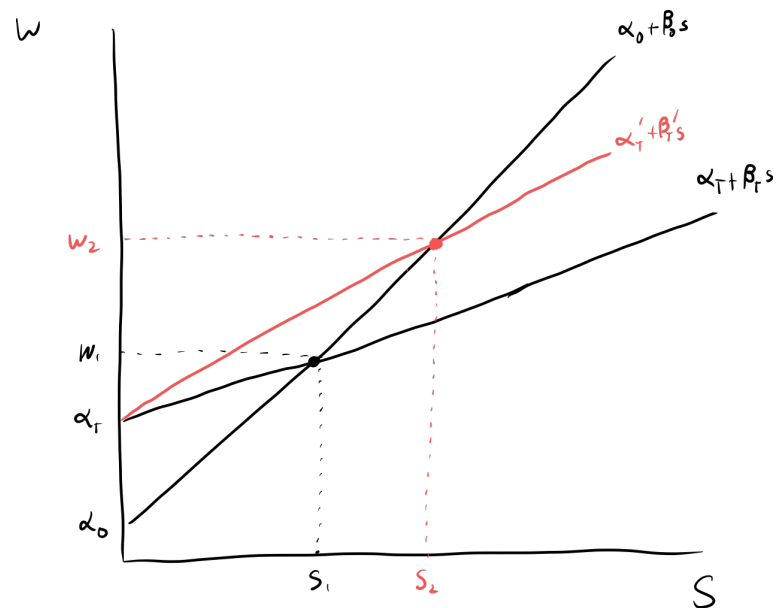
School Accountability

Problem 4

The No Child Left Behind act mandated that states implement measures of reward and punishment on the basis of performance of schools in standardized tests in reading and mathematics. Specifically, qua Dee and Jacob's description, NCLB mandated sanctions such as staff dissolution and school restructuring for schools that were recipients of funds from Title I of the ESEA that failed to meet adequate yearly progress goals. The primary intent of NCLB was to improve outcomes for low-performing schools by aligning incentives for education with measurable targets of performance and progress.

Problem 5

(a) My elementary school's academic progress was rated as an 8/10, with test scores well above the state average — the school had 93% proficiency in math, compared to the state average of 35%, 91% proficiency in English, compared to the state average of 47%, and 88% proficiency in science, compared to the state average of 30%.

The only subgroup that was tested was Asians (as the school is 88% Asian), and were around the same level of proficiency as the general population of the school.

(b) The school was 4% White, 3% Hispanic, 88% Asian, and 1% African-American. 8% of students receive free or reduced-price lunch, and 9% are English language learners. It is likely that the ratings overestimate the quality of education at the school, due to the particularly unrepresentative demographics of students.

(c) California could better normalize for student demographics (especially on the basis of income) so as to better reflect a tabula rasa-esque approach towards receiving education at the school. However, it is quite difficult to normalize on the basis of demographics in a school with a particularly unrepresentative student body.

(d) Based on the test scores, I would probably send my children to the elementary school since it evidently has a very high level of proficiency among its students. How much of that is peer effects vs. teacher quality is hard to determine, however.

Problem 6

(a) The average score in teacher i's class in any given year is influenced by a multitude of factors outside of teacher i's control, and thus assigning accountability measures on the basis of random variation would be quite detrimental. However, at the same time, this methodology is also one of the simplest measures to implement.

(b) Similarly to using average test score, a cutoff metric would be subject to idiosyncratic variation that would assign punishment or reward without basis in the teacher's quality itself. However, similar to using average test scores, this metric would be one of the simplest measures to implement.

(c) This would likely be the most effective measure of teacher value add, as it effectively extracts the effect of the teacher on the students' test performance. However, at the same time, harmonizing such data would be costly.

(d) This measure would be easier to implement than the previous measure, as it measures changes in test scores for a given year, but also is not a true measure of value-add, as changes in test scores are still subject to idiosyncratic variation from year to year.