

Table 1: Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Student Statistics ( $n=356,735$ , Gr.3 – 5 only)				
Std. Read. Score	0.1041	0.9538	-3.590	2.858
Std. Math Score	0.0864	0.9974	-3.319	2.794
Female	0.4889	0.4999	0	1
Minority	0.3962	0.4811	0	1
FRL	0.4502	0.4975	0	1
LEP	0.0626	0.2423	0	1
Disabled	0.1268	0.3327	0	1
School made AYP	0.3565	0.4790	0	1
Teacher Statistics ( $n=87,522$ , K – Gr. 5)				
Female	0.8693	0.3371	0	1
Minority	0.1682	0.3740	0	1
New Teacher	0.0673	0.2505	0	1
Transfer	0.0742	0.2622	0	1
From Ahn and Vigdor (2016)				

Table 2: Non-parametric RD estimates of the impact of failing

	Math Score Growth	Change in Avg. Yrs. Experience
Optimal bandwidth	0.0349** (0.0176)	0.9156** (0.4433)
Half optimal bandwidth	0.0459** (0.0233)	1.4988** (0.6940)
Twice optimal bandwidth	0.0281* (0.0154)	0.4934 (0.3468)

Note: Standard errors in parentheses. Bandwidth determination by Imbens-Kalyanaraman algorithm. \*\*\* denotes significance at 1%; \*\* 5%, \* 10% level.

Table 3: Non-parametric RD estimates at non-treatment points

	Math Score Growth	Change in Avg. Yrs. Experience
<b>At Treatment Point</b>		
Optimal bandwidth	0.0349** (0.0176)	0.9156** (0.4433)
Half optimal bandwidth	0.0459** (0.0233)	1.4988** (0.6940)

Twice optimal bandwidth	0.0281*	0.4934
	(0.0154)	(0.3468)
<b>At Treatment Point - 0.05</b>		
Optimal bandwidth	-0.0165	-0.3902
	(0.0136)	(0.3251)
Half optimal bandwidth	-0.0219	-0.4432
	(0.0160)	(0.3815)
Twice optimal bandwidth	-0.0156	-0.3848
	(0.0131)	(0.3117)
<b>At Treatment Point - 0.1</b>		
Optimal bandwidth	-0.0065	-0.2023
	(0.0149)	(0.4557)
Half optimal bandwidth	0.0064	-0.0011
	(0.0184)	(0.5874)
Twice optimal bandwidth	-0.0116	-0.2297
	(0.0137)	(0.4151)
<b>At Treatment Point + 0.05</b>		
Optimal bandwidth	0.0067	-0.3938
	(0.0164)	(0.4131)
Half optimal bandwidth	-0.0010	-0.7601
	(0.0207)	(0.5362)
Twice optimal bandwidth	0.0122	-0.3382
	(0.0151)	(0.3569)
<b>At Treatment Point - 0.1</b>		
Optimal bandwidth	-0.0214	-0.0585
	(0.0207)	(0.3986)
Half optimal bandwidth	-0.0430*	-0.1764
	(0.0242)	(0.5170)
Twice optimal bandwidth	-0.0082	-0.0611
	(0.0199)	(0.3668)

Note: Standard errors in parentheses. Bandwidth determination by Imbens-Kalyanaraman algorithm. \*\*\* denotes estimate significant at 1%; \*\* 5%, \* 10% level.

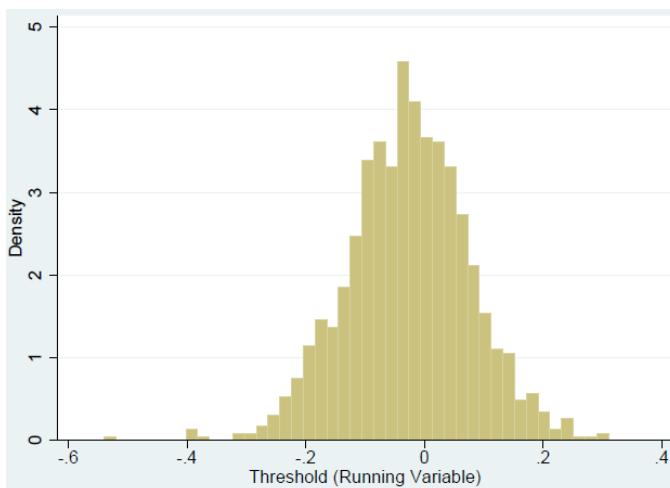


Figure 1: histogram of running variable

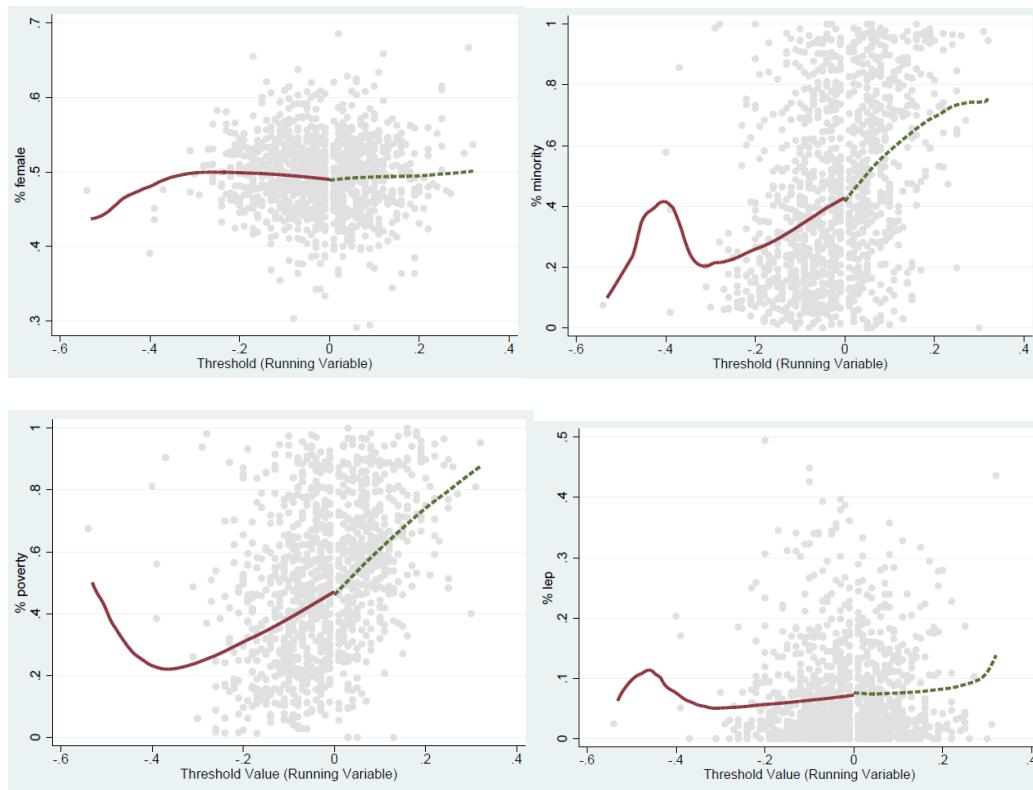


Figure 2: Placebo RD (local linear) regressions with school level demographic characteristics as outcome variables

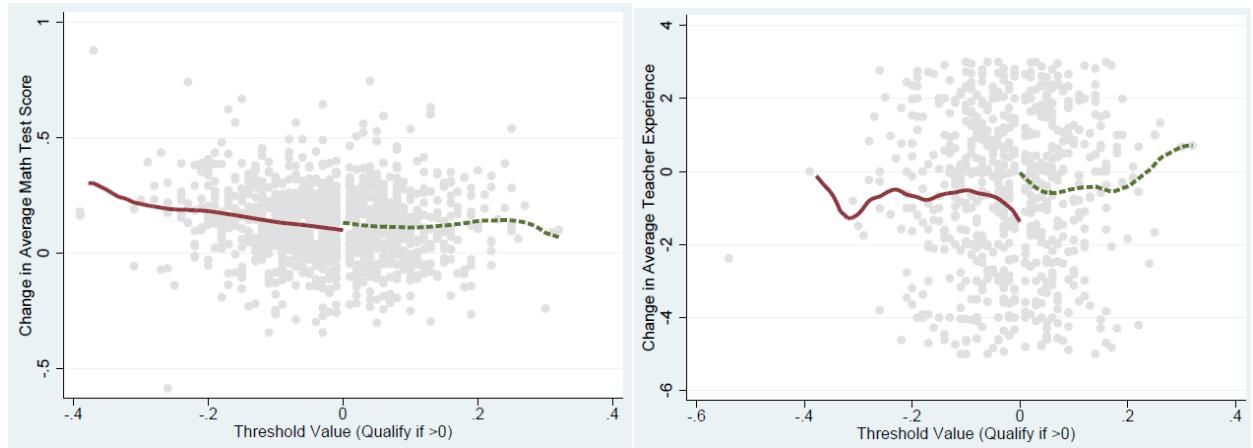


Figure 4: RD (local linear) graph of impact of bonus loss on math score growth and change in average years of teacher experience.

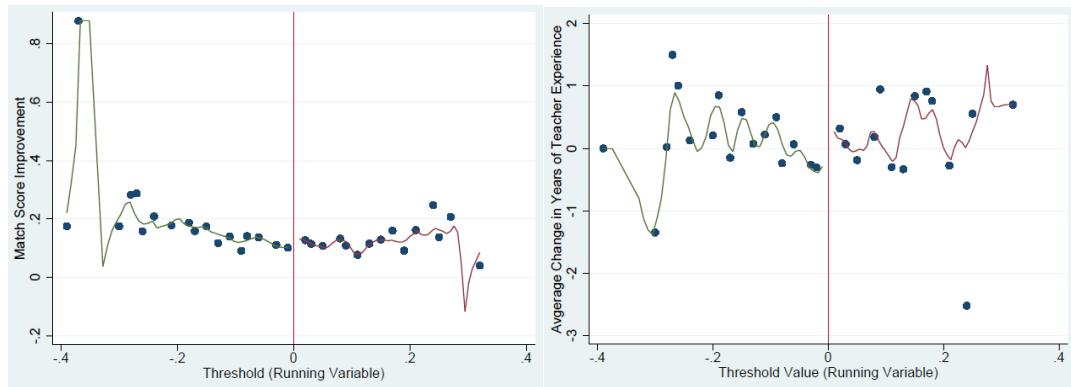


Figure 3: RD (local linear) output with averaged running variables (50 points)