

Table 1: Accountability History

| # of Times Bonus Received | % of Schools |
|---------------------------|--------------|
| 5                         | 34.50%       |
| 4                         | 27.90%       |
| 3                         | 23.30%       |
| 2                         | 9.60%        |
| 1                         | 3.30%        |
| 0                         | 1.30%        |

Five year accountability history of schools (2002 - 2007).

Table 2: Transition Matrix between High and Low-stakes Grades

|        |             | Year t+1   |             |
|--------|-------------|------------|-------------|
|        |             | low-stakes | high-stakes |
| Year t | low-stakes  | 0.9385     | 0.0615      |
|        | high-stakes | 0.1296     | 0.8703      |

Table 3: Characteristics of Transitioning Teachers

|                 | high - high | high - low | low - low | low - high |
|-----------------|-------------|------------|-----------|------------|
| female          | 0.9363      | 0.9373     | 0.9244    | 0.9306     |
| minority        | 0.1544      | 0.1373     | 0.1403    | 0.1679     |
| no fixed effect | 0.0253      | 0.0778     | 0.0235    | 0.0835     |

Table 4: Estimates of Education Production

| Variable                | Reading Score     | Math Score        |
|-------------------------|-------------------|-------------------|
| last yr. score          | 0.7066 (0.0006)   | 0.7399 (0.0005)   |
| female                  | 0.0377 (0.0010)   | 0.0032 (0.0009)   |
| minority                | -0.1637 (0.0013)  | -0.1431 (0.0012)  |
| parent low ed.          | -0.1748 (0.0012)  | -0.1564 (0.0011)  |
| class size              | -0.0032 (0.0002)  | -0.0047 (0.0002)  |
| tch. female             | 0.0066 (0.0275)   | 0.0204 (0.0253)   |
| tch. minority           | -0.0354 (0.0184)  | -0.0012 (0.0169)  |
| experience              | 0.0027 (0.0012)   | 0.0030 (0.0011)   |
| experience <sup>2</sup> | -0.0002 (0.0001)  | -0.0003 (0.0001)  |
| certified               | -0.0105 (0.0046)  | -0.0094 (0.0042)  |
| peer female %           | 0.0323 (0.0068)   | 0.0448 (0.0062)   |
| peer minority %         | -0.0589 (0.0073)  | -0.0622 (0.0067)  |
| school size/1000        | -0.0132 (0.0079)  | -0.0199 (0.0001)  |
| school minority %       | 0.0130 (0.0126)   | 0.0361 (0.0115)   |
| school rural            | -0.0064 (0.0030)  | -0.0029 (0.0028)  |
| Observations            | 1,498,471         | 1,507,394         |
| FE                      | 2.14e-11 (0.1693) | 2.59e-11 (0.2434) |

NCERDC data from 1998/99 to 2002/03. FE is fixed effect. Low parental education is HS degree or below.

Table 5: Estimates of Matching Parameters at half bandwidth<sup>†</sup>

| Variable   | Estimate (treatment) |                         | Estimate (control) |                         |
|--|----------------------|-------------------------|--------------------|-------------------------|
|  | Estimate             | 95% CI                  | Estimate           | 95% CI                  |
|  | Teacher-side         |                         |                    |                         |
| $\Delta$ distance %                              | -1                   | super-consistent        | -1                 | super-consistent        |
| $\Delta$ urbanicity                              | 0.2917               | ( -4.2999 , 4.8833 )    | 1.2304             | ( -1.3707 , 3.8315 )    |
| $\Delta$ classroom minority %                    | -16.3041             | ( -21.0058 , -11.6024 ) | -26.7427           | ( -29.5563 , -23.9291 ) |
| $\Delta$ school minority %                       | -15.6027             | ( -17.057 , -14.1484 )  | -23.8347           | ( -26.7396 , -20.9298 ) |
| $\Delta$ classroom minority % X teacher minority | 19.8805              | ( 15.0759 , 24.6851 )   | -4.0252            | ( -4.8562 , -3.1942 )   |
| $\Delta$ school minority % X teacher minority    | 19.766               | ( 18.3117 , 21.2203 )   | -3.1669            | ( -4.1593 , -2.1745 )   |
| $\Delta$ level achievement                       | -4.7151              | ( -6.8779 , -2.5523 )   | -5.6782            | ( -7.6707 , -3.6857 )   |
| Level achievement X experience                   | 27.7535              | ( 25.2621 , 30.2449 )   | 23.5859            | ( 22.0487 , 25.1231 )   |
| Level achievement X math FE                      | 26.3872              | ( 24.007 , 28.7674 )    | 22.0942            | ( 20.2173 , 23.9711 )   |
| Level achievement X certification                | 16.8675              | ( 14.5139 , 19.2211 )   | 8.4378             | ( 6.735 , 10.1406 )     |
| Level achievement X teacher minority             | -16.9034             | ( -19.5703 , -14.2365 ) | -2.1815            | ( -3.8463 , -0.5167 )   |
| ABC pressure X experience                        | 16.2968              | ( 13.2945 , 19.2991 )   | 6.4012             | ( 5.0915 , 7.7109 )     |
| ABC pressure X math FE                           | 15.4681              | ( 12.2857 , 18.6505 )   | -0.7207            | ( -1.9654 , 0.524 )     |
| ABC pressure X certification                     | 6.0194               | ( 3.5066 , 8.5322 )     | -0.6               | ( -1.7911 , 0.5911 )    |
| ABC pressure X teacher minority                  | 8.4168               | ( 5.1048 , 11.7288 )    | 2.8049             | ( 1.4546 , 4.1552 )     |
| Level X ABC X experience                         | 20.1951              | ( 17.8478 , 22.5424 )   | 25.4919            | ( 24.2354 , 26.7484 )   |
| Level X ABC X math FE                            | 18.6013              | ( 16.302 , 20.9006 )    | 24.1063            | ( 22.8915 , 25.3211 )   |
| Level X ABC X certification                      | 8.9186               | ( 6.6508 , 11.1864 )    | 10.0921            | ( 8.895 , 11.2892 )     |
| Level X ABC X teacher minority                   | -16.3491             | ( -18.9396 , -13.7586 ) | -15.3683           | ( -16.6686 , -14.068 )  |
| $h$ (bandwidth)                                  | 0.5635               |                         |                    |                         |

<sup>†</sup>Experience and fixed effects are converted to percentile values. Level achievement is average math proficiency rate at the school-level.

Table 6: Estimates of Matching Parameters at double bandwidth<sup>†</sup>

| Variable   | Estimate (treatment) | 95% CI                  | Estimate (control) | 95% CI                  |
|--|----------------------|-------------------------|--------------------|-------------------------|
| Teacher-side                                     |                      |                         |                    |                         |
| $\Delta$ distance %                              | -1                   | super-consistent        | -1                 | super-consistent        |
| $\Delta$ urbanicity                              | -0.712               | ( -7.1903 , 5.7663 )    | -1.301             | ( -3.5892 , 0.9872 )    |
| $\Delta$ classroom minority %                    | -16.6591             | ( -23.5547 , -9.7635 )  | -25.5518           | ( -28.4915 , -22.6121 ) |
| $\Delta$ school minority %                       | -12.4842             | ( -13.2392 , -11.7292 ) | -26.1406           | ( -29.2205 , -23.0607 ) |
| $\Delta$ classroom minority % X teacher minority | 18.6496              | ( 11.5749 , 25.7243 )   | 2.6434             | ( 1.8662 , 3.4206 )     |
| $\Delta$ school minority % X teacher minority    | 20.3022              | ( 19.5472 , 21.0572 )   | -2.2801            | ( -3.1063 , -1.4539 )   |
| $\Delta$ level achievement                       | -6.6851              | ( -10.4087 , -2.9615 )  | -4.8311            | ( -6.8259 , -2.8363 )   |
| Level achievement X experience                   | 24.1181              | ( 20.1838 , 28.0524 )   | 24.8476            | ( 23.4928 , 26.2024 )   |
| Level achievement X math FE                      | 27.4209              | ( 23.5777 , 31.2641 )   | 26.0206            | ( 24.3215 , 27.7197 )   |
| Level achievement X certification                | 15.4257              | ( 11.7684 , 19.083 )    | 12.069             | ( 10.4195 , 13.7185 )   |
| Level achievement X teacher minority             | -17.7221             | ( -21.5768 , -13.8674 ) | -4.9281            | ( -6.4182 , -3.438 )    |
| ABC pressure X experience                        | 15.345               | ( 10.8974 , 19.7926 )   | 8.3549             | ( 7.0941 , 9.6157 )     |
| ABC pressure X math FE                           | 15.3431              | ( 10.2163 , 20.4699 )   | -5.1958            | ( -6.5844 , -3.8072 )   |
| ABC pressure X certification                     | 8.5537               | ( 4.8052 , 12.3022 )    | 2.8014             | ( 1.5241 , 4.0787 )     |
| ABC pressure X teacher minority                  | 9.2769               | ( 4.2299 , 14.3239 )    | 4.384              | ( 2.9781 , 5.7899 )     |
| Level X ABC X experience                         | 21.3611              | ( 17.7288 , 24.9934 )   | 26.2716            | ( 25.1453 , 27.3979 )   |
| Level X ABC X math FE                            | 18.2931              | ( 14.5381 , 22.0481 )   | 25.8632            | ( 24.5242 , 27.2022 )   |
| Level X ABC X certification                      | 10.0714              | ( 6.5543 , 13.5885 )    | 14.9942            | ( 13.7642 , 16.2242 )   |
| Level X ABC X teacher minority                   | -19.6802             | ( -23.4354 , -15.925 )  | -16.0872           | ( -17.3289 , -14.8455 ) |
| $h$ (bandwidth)                                  | 2.254                |                         |                    |                         |

4

<sup>†</sup>Experience and fixed effects are converted to percentile values. Level achievement is average math proficiency rate at the school-level.

Table 7: Estimates of Matching Parameters with Intr-District Transfers Only<sup>†</sup>

| Variable   | Point Estimate | 95% CI                  |
|--|----------------|-------------------------|
| Teacher-side                                     |                |                         |
| $\Delta$ distance %                              | -1             | super-consistent        |
| $\Delta$ urbanicity                              | -3.9982        | ( -9.4829 , 1.4865 )    |
| $\Delta$ classroom minority %                    | -17.2341       | ( -22.6701 , -11.7981 ) |
| $\Delta$ school minority %                       | -12.7087       | ( -16.7341 , -8.6833 )  |
| $\Delta$ classroom minority % X teacher minority | 11.4425        | ( 5.9839 , 16.9011 )    |
| $\Delta$ school minority % X teacher minority    | 29.7103        | ( 25.6889 , 33.7317 )   |
| $\Delta$ level achievement                       | -4.7196        | ( -9.0956 , -0.3436 )   |
| Level achievement X experience                   | 20.5722        | ( 16.7652 , 24.3792 )   |
| Level achievement X math FE                      | 29.7515        | ( 26.1217 , 33.3813 )   |
| Level achievement X certification                | 23.2207        | ( 18.3068 , 28.1346 )   |
| Level achievement X teacher minority             | -21.3918       | ( -26.2383 , -16.5453 ) |
| ABC pressure X experience                        | 5.7138         | ( 2.2931 , 9.1345 )     |
| ABC pressure X math FE                           | 4.9028         | ( -0.1917 , 9.8250 )    |
| ABC pressure X certification                     | 6.9701         | ( 3.3889 , 10.5513 )    |
| ABC pressure X teacher minority                  | 7.1572         | ( 3.7296 , 10.5848 )    |
| Level X ABC X experience                         | 15.8396        | ( 12.617 , 19.0622 )    |
| Level X ABC X math FE                            | 6.7542         | ( 3.7155 , 9.7929 )     |
| Level X ABC X certification                      | 3.0626         | ( -0.4363 , 6.5615 )    |
| Level X ABC X teacher minority                   | -30.0116       | ( -33.3382 , -26.685 )  |
| $h$ (bandwidth)                                  | 1.366          |                         |

<sup>†</sup>Experience and fixed effects are converted to percentile values. Level achievement is average math proficiency rate at the school-level.

Table 8: Estimates of Matching Parameters with 2002/03 Sample Excluded<sup>†</sup>

| Variable   | Point Estimate | 95% CI                  |
|--|----------------|-------------------------|
| Teacher-side                                     |                |                         |
| $\Delta$ distance %                              | -1             | super-consistent        |
| $\Delta$ urbanicity                              | -3.868         | ( -6.8295 , -0.9065 )   |
| $\Delta$ classroom minority %                    | -7.0629        | ( -9.3692 , -4.7566 )   |
| $\Delta$ school minority %                       | -7.2226        | ( -9.0392 , -5.406 )    |
| $\Delta$ classroom minority % X teacher minority | 21.4377        | ( 19.1319 , 23.7435 )   |
| $\Delta$ school minority % X teacher minority    | 19.8747        | ( 18.0579 , 21.6915 )   |
| $\Delta$ level achievement                       | 0.1164         | ( -2.0764 , 2.3092 )    |
| Level achievement X experience                   | 18.204         | ( 16.8264 , 19.5816 )   |
| Level achievement X math FE                      | 28.1991        | ( 26.851 , 29.5472 )    |
| Level achievement X certification                | 21.6601        | ( 20.5634 , 22.7568 )   |
| Level achievement X teacher minority             | -12.8378       | ( -14.295 , -11.3806 )  |
| ABC pressure X experience                        | 4.975          | ( 2.9987 , 6.9513 )     |
| ABC pressure X math FE                           | 4.9121         | ( 2.8852 , 6.939 )      |
| ABC pressure X certification                     | 12.7146        | ( 11.5051 , 13.9241 )   |
| ABC pressure X teacher minority                  | 5.2897         | ( 3.1525 , 7.4269 )     |
| Level X ABC X experience                         | 14.1353        | ( 12.7883 , 15.4823 )   |
| Level X ABC X math FE                            | 11.9452        | ( 10.6245 , 13.2659 )   |
| Level X ABC X certification                      | 7.6802         | ( 6.6651 , 8.6953 )     |
| Level X ABC X teacher minority                   | -20.9315       | ( -22.3591 , -19.5039 ) |
| $h$ (bandwidth)                                  | 1.701          |                         |

<sup>†</sup>Experience and fixed effects are converted to percentile values. Level achievement is average math proficiency rate at the school-level.