

Table A1 - Estimates from Regressions of the 1999 Measurement Error in the School Matriculation Rate on the 2001 Student and School Characteristics

| | All Schools | Eligible Schools | RT Schools |
|-----------------------------------|-------------------|---------------------|-------------------|
| | (1) | (2) | (3) |
| A. School characteristics | | | |
| Religious schools | -0.008 (0.007) | -0.026 (0.017) | -0.065 (0.031) |
| Arab school | -0.022 (0.009) | -0.013 (0.021) | 0.038 (0.058) |
| B. Student background | | | |
| Father education | 0.001 (0.001) | 0.001 (0.003) | -0.011 (0.007) |
| Mother education | 0.000 (0.001) | -0.002 (0.002) | -0.008 (0.006) |
| Number of siblings | -0.008 (0.002) | -0.003 (0.005) | -0.007 (0.014) |
| Gender (Male=1) | 0.023 (0.013) | -0.001 (0.035) | -0.087 (0.060) |
| Immigrant | 0.068 (0.046) | -0.364 (0.173) | -0.674 (0.247) |
| C. Student lagged outcomes | | | |
| Math credits | 0.010 (0.004) | 0.009 (0.013) | -0.023 (0.034) |
| English credits | 0.025 (0.008) | 0.117 (0.042) | 0.100 (0.091) |
| History credits | 0.007 (0.007) | 0.026 (0.019) | 0.055 (0.032) |
| Total credits | 0.003 (0.002) | 0.002 (0.005) | -0.011 (0.011) |
| Average score | 0.001 (0.000) | 0.001 (0.001) | 0.000 (0.002) |
| N | 508 | 98 | 36 |

Notes: The coefficients presented in the table are based on *separate* regressions of the 1999 measurement error on student's characteristics, lagged Bagrut outcomes and school's characteristics. The data used are school sample means. Conventional standard errors are presented in parenthesis.

Table A2: Treatment-Control Differences in Employment and Income Outcomes (11 Years After High-School Graduation) , Within Pre (2000) and Post (2001) Treatment Cohorts, With and Without Controlling for School Type, Natural Experiment and Regression Discontinuity Samples

| | 2000 (Pre-Treatment) Cohort | 2001 (Treatment) Cohort |
|--|-----------------------------------|-------------------------------|
| | (1) | (2) |
| A. Full Natural Experiment Sample | | |
| Total Annual Earnings with control for school type (NIS) | -601 (2,262) | 2,359 (2,612) |
| Total Annual Earnings without control for school type (NIS) | -5,681 (3,265) | -1,843 (3,274) |
| Months Worked with control for school type | -0.185 (0.129) | 0.016 (0.118) |
| Months Worked without control for school type | -0.507 (0.252) | -0.236 (0.193) |
| B. Regression Discontinuity Sample | | |
| Total Annual Earnings with control for school type (NIS) | 22 (2,380) | 4,336 (3,010) |
| Total Annual Earnings without control for school type (NIS) | -3,131 (3,203) | 1,075 (3,619) |
| Months Worked with control for school type | -0.248 (0.135) | 0.083 (0.145) |
| Months Worked without control for school type | -0.482 (0.236) | -0.136 (0.218) |

Notes: This table presents the simple cross-sectional difference in labor market outcomes 11 years after high school graduation. Panel A presents differences for the natural experiment sample and Panel B presents differences for the regression discontinuity sample. Standard errors are clustered at the school level.

Table A3: Differences-in-Differences Estimates of the Effect of Teachers' Bonuses Program on High

| Sample | Natural Experiment Sample | |
|---|--|--------------------|
| | Mean 2000 Cohort in Treated Schools | Treatment Estimate |
| | (1) | (2) |
| Average Matriculation Score | 74.774 (19.733) | 3.036 (0.991) |
| Received High School Matriculation (1 = Yes, 0 = No) | 0.520 (0.500) | 0.031 (0.020) |
| Number of Credit Units in Matriculation Exams | 22.199 (10.257) | 0.803 (0.334) |
| Number of Science Credit Units in Matriculation Exams | 0.518 (0.817) | 0.149 (0.071) |
| Number of Honor Level Subjects | 2.068 (1.537) | 0.184 (0.081) |
| Number of Observations | 3,967 | 15,878 |

Notes: This table presents the differences-in-differences estimates of the effect of the Teachers' Bonuses program on high-school educational outcomes based on the natural experiment sample. Column 1 reports the means and standard deviations for the 2000 (untreated) cohort in the treated schools and it is used as benchmark for assessing the size of the treatment effect. Column 2 reports the differences-in-differences estimates for each of the dependent variables. Standard errors are clustered at the school year level.

Table A4: DID Estimates of the Effect of Teachers' Bonuses Program on Post-Secondary Schooling with Wild Bootstrap Standard Errors (12 Years After High-School Graduation)

| | The Natural Experiment | | The Regression Discontinuity | |
|--|---|--|---|--|
| | Sample | | Sample | |
| | Ever Enrolled in Post- Secondary Schooling (1) | Post- Secondary Years of Schooling (2) | Ever Enrolled in Post- Secondary Schooling (3) | Post- Secondary Years of Schooling (4) |
| A. University | 0.048** | 0.250** | 0.060*** | 0.242 |
| Clustered SE | (0.019) | (0.094) | (0.020) | (0.103) |
| Wild Bootstrap SE | (0.024) | (0.131) | (0.028) | (0.143) |
| B. Academic College | -0.026 | -0.072 | -0.017 | -0.047 |
| Clustered SE | (0.019) | (0.052) | (0.026) | (0.066) |
| Wild Bootstrap SE | (0.023) | (0.065) | (0.033) | (0.088) |
| C. Any Post-Secondary Schooling | 0.028 | 0.170* | 0.041* | 0.191* |
| Clustered SE | (0.020) | (0.089) | (0.022) | (0.092) |
| Wild Bootstrap SE | (0.021) | (0.104) | (0.024) | (0.098) |
| Number of Observations | 10,077 | 10,077 | 8,230 | 8,230 |
| Weighted Number of Observations | 15,903 | 15,903 | 11,561 | 11,561 |

Notes: This table presents the difference-in-differences estimates of the effect of the teachers' bonus program on Post-Secondary schooling 12 years after high-school graduation. Columns 1-2 report the results based on the natural experiment sample and columns 3-4 based on the regression discontinuity sample. Columns 1-4 report the Differences-in-Differences estimated for each of the dependent variables. Standard errors are clustered at the school level and are created using the wild bootstrap procedure. Significance presented for the clustered and bootstrap standard errors: *** p<0.01, ** p<0.05, * p<0.1.

**Table A5: Robustness Check - Post-Secondary Schooling, RD Sample With Alternative Bandwidth)
(12 Years After High-School Graduation Outcomes)**

| | 38-53 Percent Bandwidth | | | | 37-54 Percent Bandwidth | | | |
|---------------------------------|---|-------------------|---|-------------------|---|-------------------|---|-------------------|
| | Enrollment in Post-Secondary Schooling | | Post-Secondary Years of Schooling | | Enrollment in Post-Secondary Schooling | | Post-Secondary Years of Schooling | |
| | Mean of 2000 Cohort in Treated Schools | Estimate | Mean of 2000 Cohort in Treated Schools | Estimate | Mean of 2000 Cohort in Treated Schools | Estimate | Mean of 2000 Cohort in Treated Schools | Estimate |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| A. Full Sample | | | | | | | | |
| University | 0.209 (0.407) | 0.055 (0.021) | 0.793 (1.856) | 0.221 (0.104) | 0.226 (0.418) | 0.046 (0.020) | 0.870 (1.923) | 0.219 (0.102) |
| Academic College | 0.160 (0.367) | -0.015 (0.025) | 0.423 (1.107) | -0.029 (0.066) | 0.146 (0.353) | -0.018 (0.023) | 0.383 (1.056) | -0.038 (0.064) |
| Number of Observations | 2,652 | 9,719 | 2,652 | 9,719 | 3,518 | 11,409 | 3,518 | 11,409 |
| Weighted Number of Observations | 3,064 | 12,490 | 3,064 | 12,490 | 3,737 | 13,684 | 3,737 | 13,684 |

Notes: This table presents a robustness check to the differences-in-differences regression discontinuity estimates of the effect of the teachers' pay for performance program on Post-Secondary schooling 12 years after high-school graduation. Panel A and Panel B report the results for the full and three quartile sample, respectively. Columns 1-4 report the results based on the sample derived from the 38-53 percent bandwidth, and columns 5-8 report the results based on the sample derived from the 37-54 percent bandwidth.. Columns 1,3,5, and 7 present the mean and standard error for the 2000 (untreated) cohort in the treated schools and it is used as benchmark for assessing the size of the treatment effect. Columns 2,4,6, and 8 report the Differences-in-Differences estimate for each of the dependent variables. Standard errors are clustered at the school level.

Table A6: Placebo Tests, DID Estimates, Post-Secondary Schooling - Natural Experiment Sample (12 Years After High-School Graduation)

| | Enrollment in Post-Secondary Schooling | | Post-Secondary Years of Schooling | |
|--------------------------------------|--|-------------------|--|-------------------|
| | Mean of 2000 Cohort in Treated Schools | Estimate | Mean of 2000 Cohort in Treated Schools | Estimate |
| | (1) | (2) | (3) | (4) |
| A. 1999 Before and 2000 After | | | | |
| University | 0.206 (0.404) | 0.017 (0.019) | 0.824 (1.898) | 0.024 (0.075) |
| Academic College | 0.140 (0.347) | 0.019 (0.012) | 0.380 (1.075) | 0.028 (0.039) |
| Number of Observations | 2,680 | 10,263 | 2,680 | 10,263 |
| Weighted Number of Observations | 2,680 | 8,151 | 2,680 | 8,151 |
| B. 2000 Before and 2002 After | | | | |
| University | 0.199 (0.399) | 0.015 (0.022) | 0.759 (1.829) | 0.083 (0.079) |
| Academic College | 0.149 (0.357) | -0.015 (0.017) | 0.398 (1.074) | -0.001 (0.047) |
| Number of Observations | 2,703 | 10,305 | 2,703 | 10,305 |
| Weighted Number of Observations | 2,703 | 8,151 | 2,703 | 8,151 |

Notes: This table presents a robustness check to the differences-in-differences regression estimates of the effect of the teachers bonuses program on Post-Secondary schooling 12 years after high-school graduation. The estimates presented are based on the natural experiment sample. Panel A presents the estimates from a difference-in-differences regression with 1999 as untreated ('before') period and 2000 as the treated ('after') period. Similarly, in Panel B, year 2000 is the untreated 12th grade cohort and the 2002 12th grade cohort is the treated cohort. Standard errors are clustered at the school level.

Table A7: DID Estimates of the Effect of Teachers' Bonuses Program on Post-Secondary Schooling - Treatment Allocated to Schools Randomly Within The Natural Experiment Sample (12 Years After High-School Graduation)

| | Enrollment in Post-Secondary Schooling | | Post-Secondary Years of Schooling | |
|---------------------------------|--|-------------------|--|-------------------|
| | Mean of Pre-Treatment (2000) Cohort in Treated Schools | | Mean of Pre-Treatment (2000) Cohort in Treated Schools | |
| | Estimate | | Estimate | |
| | (1) | (2) | (3) | (4) |
| University | 0.202 (0.401) | 0.066 (0.034) | 0.770 (1.867) | 0.348 (0.157) |
| Academic College | 0.178 (0.382) | -0.030 (0.029) | 0.452 (1.119) | -0.012 (0.083) |
| Number of Observations | 1,757 | 5,891 | 2,703 | 10,077 |
| Weighted Number of Observations | 2,906 | 9,065 | 4,171 | 15,903 |

Notes: This table presents placebo differences-in-differences estimates of the effect of the teachers bonus progrma on Post-Secondary schooling 12 years after high-school graduatoin. Treatment status is randomly assigned within the natural experment sample.

Table A8: DID Estimates of the Effect of The Teachers' Bonuses Program on Employment and Income with Wild Bootstrap Standard Error

| | The Natural Experiment Sample | | The Regression Discontinuity Sample | |
|--|---------------------------------------|---|---------------------------------------|---|
| | 11 Years After High-School Graduation | 9-11 Years After High-School Graduation, Stacked Regression | 11 Years After High-School Graduation | 9-11 Years After High-School Graduation, Stacked Regression |
| | Full Sample Estimate | Full Sample Estimate | Full Sample Estimate | Full Sample Estimate |
| | (1) | (2) | (3) | (4) |
| A. Employment (1=Yes, 0=No) | 0.010 | 0.012 | 0.008 | 0.012 |
| Clustered SE | (0.013) | (0.012) | (0.010) | (0.009) |
| Wild Bootstrap SE | (0.014) | (0.013) | (0.010) | (0.009) |
| B. Months Worked | 0.321* | 0.229 | 0.393** | 0.194 |
| Clustered SE | (0.172) | (0.143) | (0.164) | (0.138) |
| Wild Bootstrap SE | (0.199) | (0.152) | (0.201) | (0.144) |
| C. Annual Earnings (NIS) | 5,851** | 4,678** | 6,731* | 4,862* |
| Clustered SE | (2,793) | (2,125) | (3,463) | (2,575) |
| Wild Bootstrap SE | (3,218) | (2,266) | (4,152) | (2,712) |
| D. Annual Unemployment Insurance Benefits | 0.000 | -0.002 | -0.004 | -0.005 |
| Clustered SE | (0.015) | (0.009) | (0.019) | (0.011) |
| Wild Bootstrap SE | (0.018) | (0.009) | (0.019) | (0.012) |
| E. Annual Unemployment Insurance Benefits | 37 | 28 | -112 | -14 |
| Clustered SE | (160) | (85) | (186) | (116) |
| Wild Bootstrap SE | (178) | (94) | (200) | (144) |
| Number of Observations | 10,077 | 30,231 | 8,230 | 24,690 |
| Weighted Number of Observations | 15,903 | 47,709 | 11,561 | 34,683 |

Notes: This table presents the differences-in-differences estimates of the effect of the teachers' bonuses program on employment and income outcomes. Columns 1-2 report the results based on the natural experiment sample, and columns 3-4 based on the regression discontinuity sample. Columns 1 and 3 report results for 11 years after the high-school graduation, and columns 2 and 4 report results based on regressions with stacked data of 9-11 years after high-school graduation. The 'Employment' outcome equals 1 if an individual has worked at least one month during the year and had positive earnings, 0 otherwise. The outcome 'Annual Unemployment Insurance Benefits' equal the NIS amount of unemployment benefits an individual received in a given year. Columns 1-4 report the differences-in-differences estimates for each of the dependent variable. Standard errors are clustered at the school level and are created using the wild bootstrap procedure. Significance presented for the clustered and bootstrap standard errors: ***p<0.01, **p<0.05, *p<0.1.

Table A9: DID Estimates of the Effect of Teachers' Bonuses Program on Employment and Earnings - Treatment Allocated to Schools Randomly Within The Natural Experiment Sample (12 Years After High-School Graduation)

| | 11 Years After High-School Graduation Outcomes | | 9-11 Years After High-School Graduation Outcomes Stacked Outcomes | |
|---------------------------------|---|------------------|--|------------------|
| | Mean of 2000 Cohort in Treated Schools | Estimate | Mean of 2000 Cohort in Treated Schools | Estimate |
| | (1) | (2) | (3) | (4) |
| A. Full Sample | | | | |
| Employment (1 = Yes, 0 = No) | 0.871 (0.336) | 0.002 (0.010) | 0.840 (0.367) | 0.015 (0.013) |
| Months Worked | 9.150 (4.461) | 0.299 (0.174) | 8.732 (4.612) | 0.206 (0.144) |
| Annual Earnings (NIS) | 67,544 (55,084) | 1,425 (3,817) | 55,993 (50,485) | -882 (2,150) |
| Number of Observations | 2,622 | 8,230 | 7,866 | 24,690 |
| Weighted Number of Observations | 4,346 | 11,561 | 13,038 | 34,683 |

Notes: this table presents placebo differences-in-differences estimates of the effect of the teachers bonus program on Post-Secondary schooling 12 years after high-school graduation. Treatment status is randomly assigned within the natural experiment sample. Panel A and Panel B report the results for the full and three quartiles samples.

Table A10: Placebo Tests, DID Estimates, Employment and Earnings, Natural Experiment Sample (12 Years After High-School Graduation)

| | Mean of 2000 Cohort in Treated Schools | Estimate |
|--|--|-------------------|
| | (1) | (2) |
| A. 1999 Before and 2000 After | | |
| Employment Indicator (1 = Yes, 0 = No) | 0.829 (0.377) | 0.005 (0.016) |
| Months Worked | 8.811 (4.658) | -0.005 (0.181) |
| Total Annual Earnings (NIS) | 59,963 (52,898) | 401 (2,215) |
| Number of Observations | 2,680 | 10,263 |
| Weighted Number of Observations | 2,680 | 8,151 |
| B. 2000 Before and 2002 After | | |
| Employment Indicator (1 = Yes, 0 = No) | 0.839 (0.368) | -0.015 (0.012) |
| Months Worked | 8.988 (4.605) | 0.089 (0.181) |
| Total Annual Earnings (NIS) | 62,991 (55,226) | 2,242 (2,238) |
| Number of Observations | 2,703 | 10,305 |
| Weighted Number of Observations | 2,703 | 8,151 |

Notes: This table presents a robustness check to the differences-in-differences regression estimates of the effect of the teachers bonuses program on employment and earnings 11 years after high-school graduation. The estimates presented are based on the full sample of the natural experiment sample. Panel A presents the estimates from a difference-in-differences regression with 1999 as untreated ('before') period and 2000 as the treated ('after') period. Similarly, in Panel B, year 2000 is the untreated 12th grade cohort and the 2002 12th grade cohort is the treated cohort. Standard errors are clustered at the school level.

**Table A11: Robustness Check - Employment and Earnings, RD Sample With Alternative Bandwidth)
(11 Years After High-School Graduation Outcomes)**

| | 38-53 Percent Bandwidth | | 37-54 Percent Bandwidth | |
|--|---|------------------|---|------------------|
| | Mean of 2000 Cohort in Treated Schools | Estimate | Mean of 2000 Cohort in Treated Schools | Estimate |
| | (1) | (2) | (3) | (4) |
| Employment Indicator (1 = Yes, 0 = No) | 0.842 (0.365) | 0.010 (0.009) | 0.838 (0.369) | 0.014 (0.012) |
| Months Worked | 9.077 (4.545) | 0.383 (0.158) | 8.975 (4.591) | 0.348 (0.166) |
| Total Annual Earnings (NIS) | 63,823 (54,846) | 7,312 (3,367) | 61,902 (53,733) | 7,204 (2,892) |
| Number of Observations | 2,652 | 9,719 | 3,518 | 11,409 |
| Weighted Number of Observations | 3,064 | 12,490 | 3,737 | 13,684 |

Notes: This table presents a robustness check to the differences-in-differences regression discontinuity estimates of the effect of the teachers' pay for performance program on employment and earnings 11 years after high-school graduation. Columns 1-2 report the results based on the sample derived from the 38-53 percent bandwidth, and columns 3-4 report the results based on the sample derived from the 37-54 percent bandwidth.. Columns 1 and 3 present the mean and standard error for the 2000 (untreated) cohort in the treated schools and it is used as benchmark for assessing the size of the treatment effect. Columns 2 and 4 report the Differences-in-Differences estimate for each of the dependent variables. Standard errors are clustered at the school level.