Web Appendix for

The Long Run Economic Consequence of High-Stakes Examinations: Evidence from Transitory Variation in Pollution

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Table A1

Balancing Tests: Assessing the Relationship between Students' Characteristics and Pollution

Variable	Pooled OLS (1)	School Fixed Effects (2)
Female (1=yes)	0.00	0.10
	(0.00)	(0.00)
Father's Education	0.10	0.40
	(1.00)	(0.50)
Mother's Education	0.30	-0.10
	(1.00)	(0.60)
Number of Siblings	0.60	0.30
	(0.30)	(0.10)
Ashkenazi (1=yes)	0.00	0.00
	(0.00)	(0.00)
Sephardi (1=yes)	0.00	0.00
	(0.00)	(0.00)
Father Born in Israel (1=yes)	0.00	0.00
	(0.00)	(0.00)
Observations	54,294	54,294

Notes: Each cell in the table represents a separate regression, where the dependent variable is $PM_{2.5}$(AQI) and the independent variable is the covariate listed in the row. The regressions are estimated in the same manner as those presented in Table 7.

Table A2

Relationship Between Particulate Matter Exposure During Previous Exams and Average *Bagrut* Scores at Conclusion of 12th Grade

	Pooled OLS		Fixed Effects	
	No controls	Controls	City	School
	(1)	(2)	(3)	(4)
Panel A: All Students				
	-0.80	0.90	-0.40	1.70
	(2.90)	(2.80)	(3.50)	(2.10)
Panel B: By Sex				
Boys	-0.90	0.30	-2.40	-0.70
	(3.40)	(3.50)	(4.50)	(2.80)
Girls	-1.20	1.30	0.90	4.00
	(2.80)	(3.00)	(3.60)	(2.40)
Panel C: By Student Quality				
Low Achievement Students	2.60	3.30	0.20	2.60
	(2.50)	(2.50)	(3.30)	(2.30)
High Achievement Students	1.30	1.40	1.10	2.30
	(1.10)	(1.10)	(1.60)	(1.30)
Panel D: By Socio-Economic Status (SES)				
Low SES	-2.10	0.80	1.00	1.30
	(2.90)	(3.00)	(3.50)	(2.30)
High SES	1.10	0.10	-1.30	2.20
	(3.00)	(2.80)	(4.10)	(2.80)

Notes : Each cell in the table represents a separate regression. The regressions are estimated in the same manner as those presented in Table 7. Student quality is determined by whether the student's average *Magen* score was above or below the median. High SES is defined as children whose father was above the median level of education. Standard errors are heteroskedastic-consistent, clustered at the school level, and are reported below the coefficients in parentheses. Coefficients are reported per 100 units of $PM_{2.5}$(AQI).

Table A3

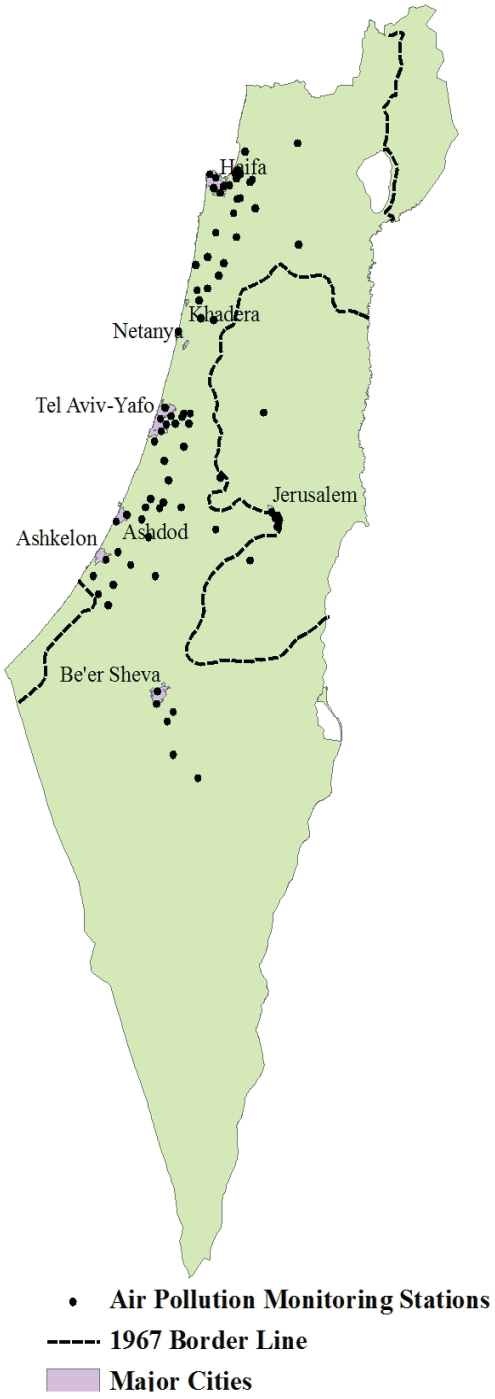
Relationship Between Particulate Matter Exposure During the Bagrut and Wages Including and Excluding Zero Wage Observations

	Pooled OLS	Fixed Effects	
	Controls	City	School
	(2)	(3)	(4)
Panel A: Including Zero Wage Students			
	-155	-120	-109
	(33)	(33)	(34)
Panel B: Excluding Zero Wage Students			
	-163	-157	-124
	(34)	(36)	(36)

Notes : Each cell in the table represents a separate regression. The regressions are estimated in the same manner as those presented in Table 7. Student quality is determined by whether the student's average *Magen* score was above or below the median. High SES is defined as children whose father was above the median level of education. Standard errors are heteroskedastic-consistent, clustered at the school level, and are reported below the coefficients in parentheses. Coefficients are reported per 100 units of $PM_{2.5}$(AQI).

Figure A1

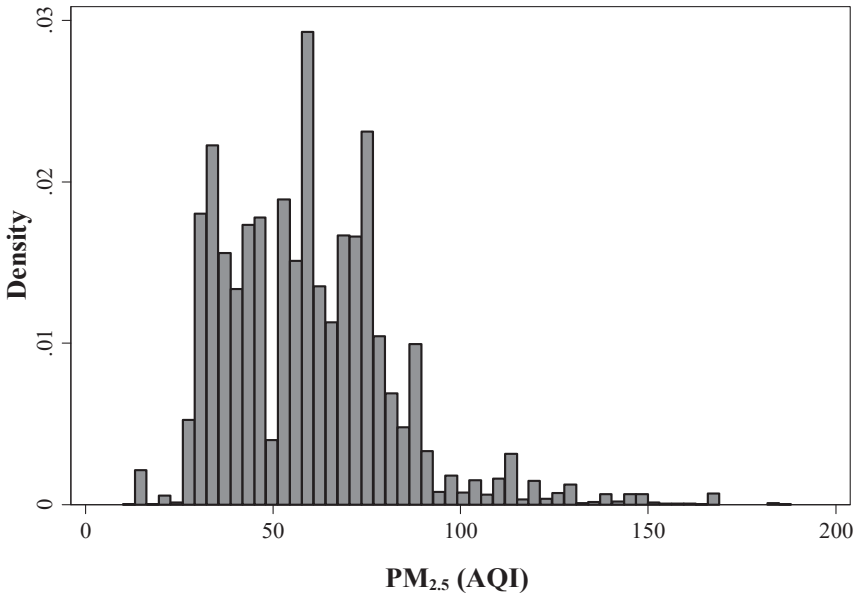
Locations of Major Cities and Air Quality Monitoring Stations in Israel



Notes : The boundaries of Israel are reported in the plot, with the main cities shaded in.

Figure A2

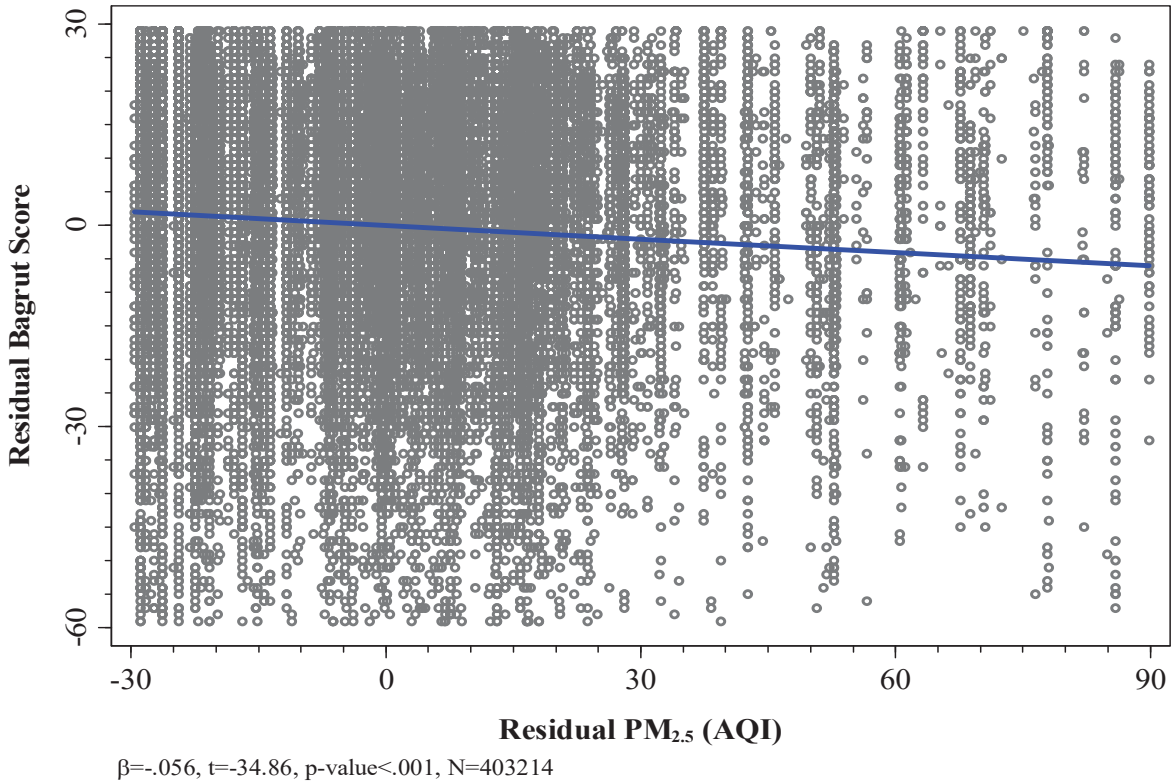
Histogram of $PM_{2.5}$ (AQI)



Notes : The figure plots the distribution of $PM_{2.5}$ (AQI) among the sample of 415,219 examinations.

Figure A3

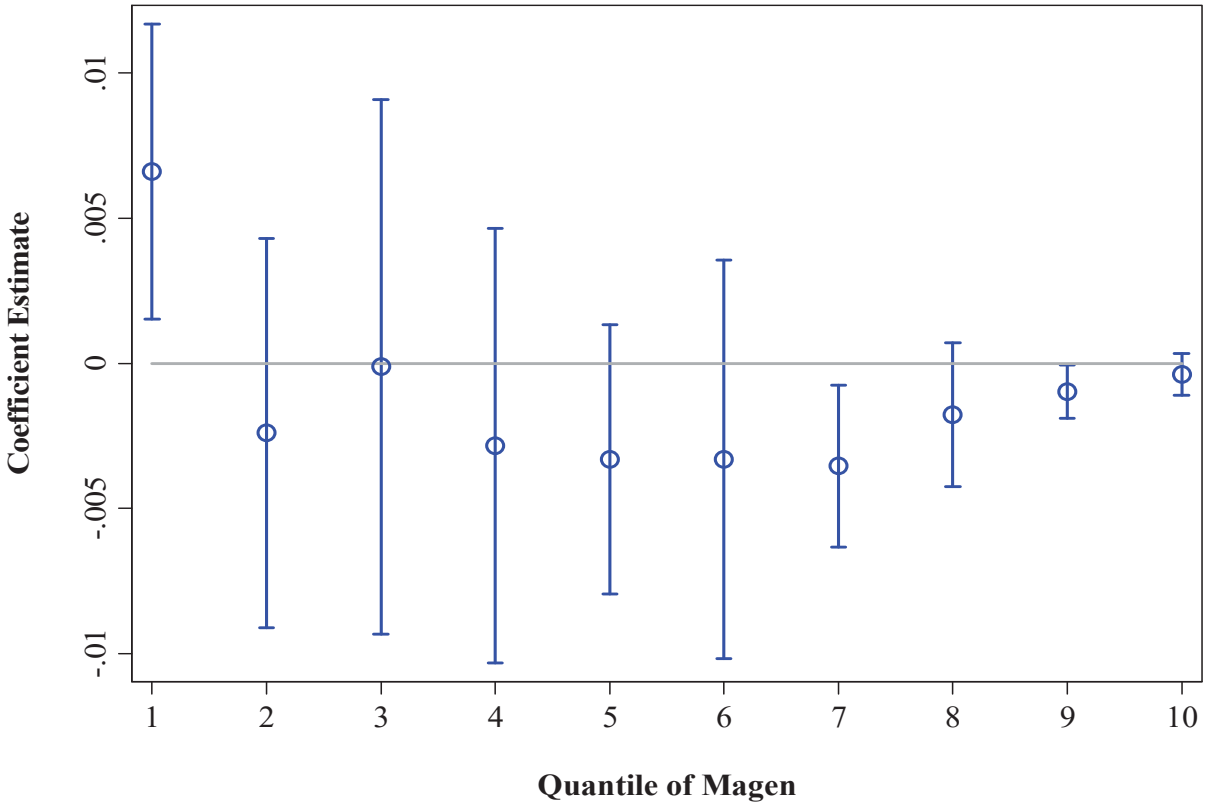
Scatter Plot of Pollution and *Bagrut* Test Scores Without Bins



Notes : Each observation is an administered test. Residual *Bagrut* scores and Residual $PM_{2.5}$ are generated by regressing each variable on student fixed effects, and calculating the residual. The regression coefficients are calculated with all points but the plot only reports a random sample of 10% of test administrations.

Figure A4

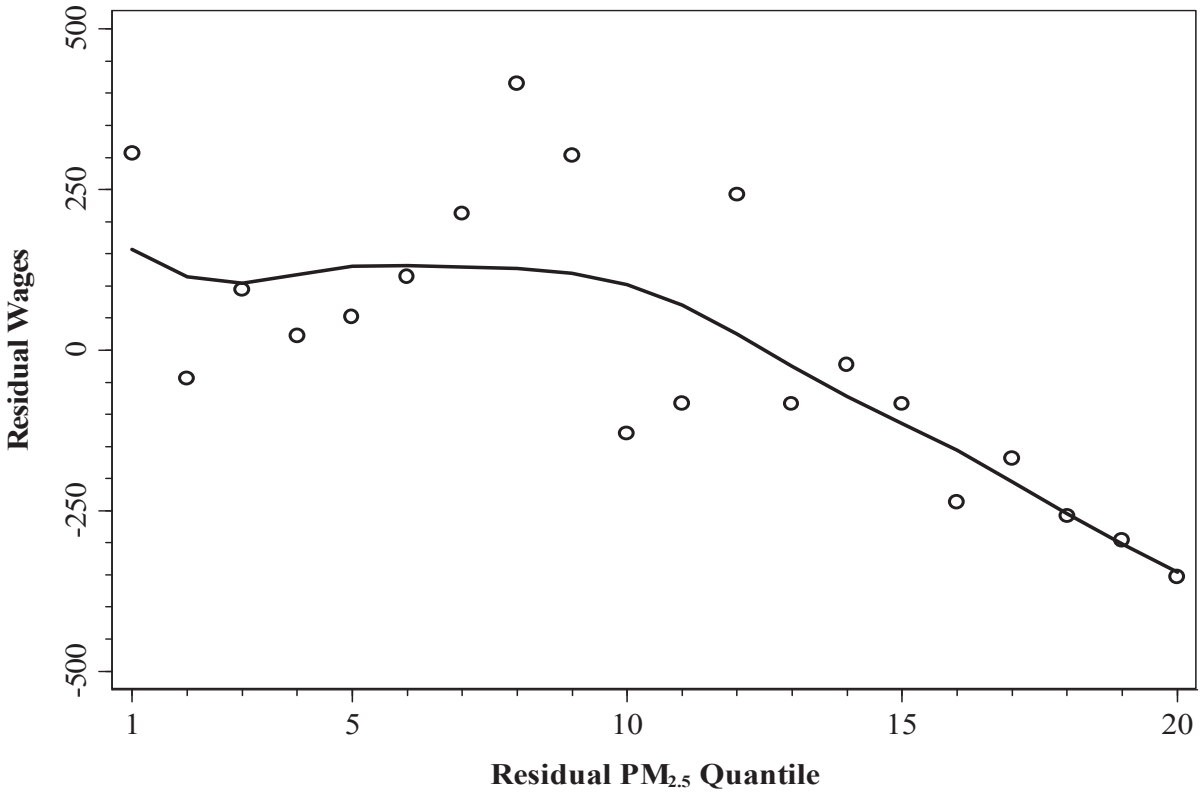
Impact of $PM_{2.5}$ on *Bagrut* Failure by *Magen* Decile



Notes : The plot reports the coefficients from a linear probability of *Bagrut* failure on $PM_{2.5}$ AQI separately by *Magen* decile. The models are estimated with our standard controls and student fixed effects. Standard errors are clustered by school. Effects are reported in terms of change in score per 10 additional units of $PM_{2.5}$ (AQI).

Figure A5

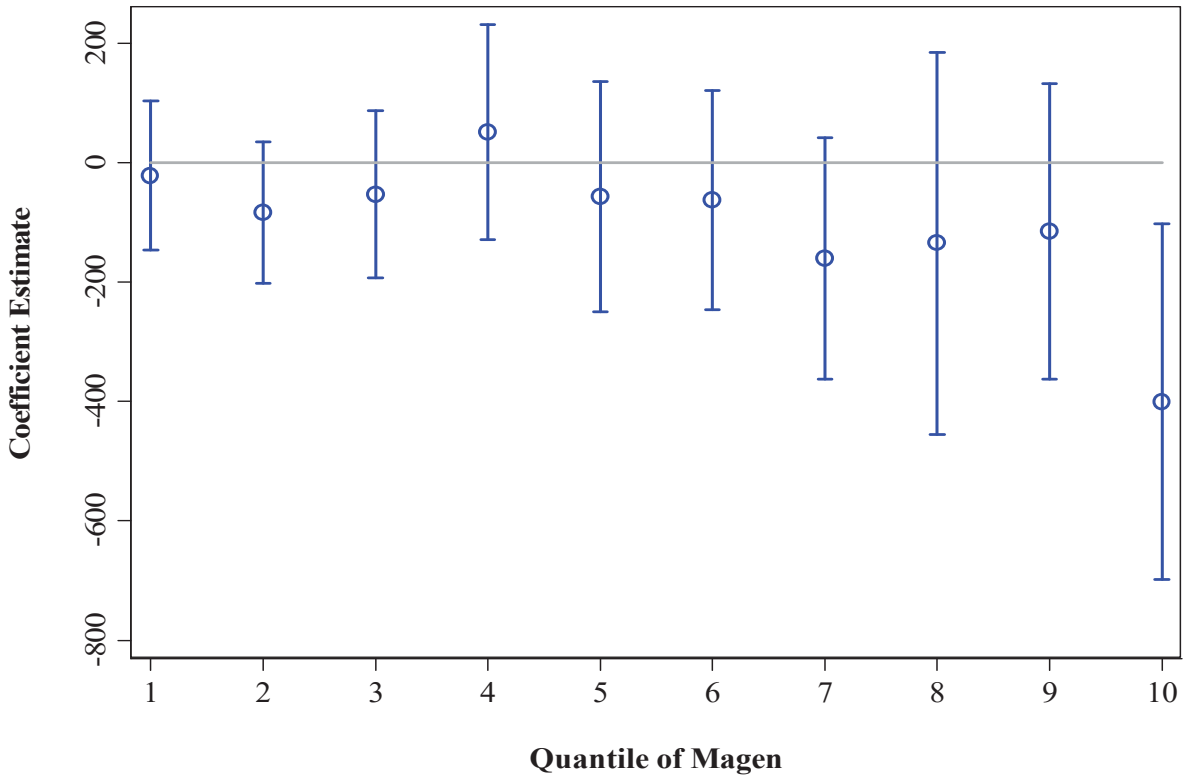
Residual Wages and Residual Pollution by Quantile of Pollution Exposure



Notes : Each observation is a quantile of residual $PM_{2.5}$. Residual wages scores and Residual $PM_{2.5}$ are generated by regressing each variable on school fixed effects, and calculating the residual. The plot is generated using lowess bandsmoother.

Figure A6

Impact of $PM_{2.5}$ Exposure during the *Bagrut* on Wages by Student Quality Decile



Notes : The plot reports the relationship between wages and $PM_{2.5}$ exposure during the Bagrut using school fixed effects, separately by decile of *Magen* (average course grade).