

ERRATUM TO “LEVERAGING LOTTERIES FOR SCHOOL
VALUE-ADDED: TESTING AND ESTIMATION”

JOSHUA D. ANGRIST
PETER D. HULL
PARAG A. PATHAK
CHRISTOPHER R. WALTERS

This document corrects an error in our article “Leveraging Lotteries for School Value-Added: Testing and Estimation,” published in the *Quarterly Journal of Economics* in February 2017. Due to a programming error, the standard errors for the variance components in [Table VI](#) of the published article are not correct. A corrected version of this table appears below. In view of these changes, two sentences on p. 906 should be revised as follows:

“Estimated covariances between β_j and b_j , denoted $\sigma_{\beta b}$, are negative and mostly statistically significant, a result that can be seen in the third row of [Table VI](#).”

After correcting the error, the covariance estimates are statistically insignificant.

“The estimated reliability of the uncontrolled specification equals 0.08 with a standard error of 0.20, implying that school average test scores are only weakly related to school effectiveness.”

The correct standard error is 0.07, not 0.20.

Correcting the programming error also led to changes in the standard errors for the variance component estimates in [Online Appendix Tables A.III, A.IV and A.VIII](#). We updated the [Online Appendix](#) with corrected tables. No changes to the discussion of these tables in the published article or appendix are necessary.

TABLE VI
JOINT DISTRIBUTION OF CAUSAL VALUE-ADDED AND VAM BIAS FOR SIXTH-GRADE MATH SCORES

	Models without sector effects			Models with sector effects	
	Uncontrolled (1)	Lagged score (2)	Gains (3)	Lagged score (4)	Gains (5)
σ_{β}	0.195 (0.058)	0.220 (0.058)	0.222 (0.057)	0.171 (0.059)	0.170 (0.059)
σ_{θ}	0.501 (0.059)	0.182 (0.043)	0.166 (0.056)	0.148 (0.058)	0.133 (0.041)
$\sigma_{\beta\theta}$	-0.018 (0.023)	-0.014 (0.018)	-0.017 (0.019)	-0.016 (0.017)	-0.013 (0.015)
r_{α}	0.078 (0.072)	0.644 (0.194)	0.753 (0.238)	0.694 (0.357)	0.783 (0.283)
VA shifters				0.426 (0.104)	0.396 (0.106)
				0.130 (0.129)	0.111 (0.129)
				0.104 (0.042)	0.066 (0.041)
				-0.005 (0.103)	-0.063 (0.099)
				-0.121 (0.124)	-0.089 (0.121)
χ^2 statistic (d.f.):	10.9 (7)	10.8 (7)	9.1 (7)	9.0 (13)	6.0 (13)
Overid. p -value:	0.145	0.147	0.247	0.773	0.946

Notes. This table reports simulated minimum distance estimates of parameters of the joint distribution of causal school value-added and OLS bias for sixth-grade math scores. The moments used in estimation are functions of OLS value-added, lottery reduced-form, and first-stage estimates, as described in Online Appendix B. Uncontrolled estimates come from an OLS regression that includes year effects. The notes to Table III describe the other value-added models. Simulated moments are computed from 500 samples constructed by drawing school-specific parameters from the random coefficient distribution along with estimation errors based on the asymptotic covariance matrix of the estimates. The estimates in columns (4) and (5) are from models allowing the means of the random coefficients distribution to depend on school sector. Moments are weighted by an estimate of the inverse covariance matrix of the moment conditions, calculated from a first-step estimate using an identity weighting matrix. The weighting matrix is produced using 1,000 simulations, drawn independently from the samples used to simulate the moments.