

# Task 2

## Applied Empirical Economics

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### Task 2A

Table 1: Summary Statistics of Angrist and Krueger (1991) Data

	(1)				
	Mean	Min	Max	Median	SD
Age	39.94	30.00	50.00	40.00	5.92
Age (quarterly)	40.31	30.25	50.00	40.75	5.91
Years of education	12.84	0.00	20.00	12.00	3.27
En 0 cent	0.20	0.00	1.00	0.00	0.40
Es 0 cent	0.06	0.00	1.00	0.00	0.24
Log weekly wage	5.68	-2.34	11.23	5.79	0.72
Married (1 = married)	0.84	0.00	1.00	1.00	0.36
MIDATL	0.17	0.00	1.00	0.00	0.37
MT	0.05	0.00	1.00	0.00	0.21
New Eng	0.06	0.00	1.00	0.00	0.23
Census	77.68	70.00	80.00	80.00	4.22
Quarter of birth	2.52	1.00	4.00	3.00	1.11
Race (1 = black)	0.08	0.00	1.00	0.00	0.27
SMSA (1 = center city)	0.21	0.00	1.00	0.00	0.41
SOATL	0.17	0.00	1.00	0.00	0.37
Wn 0 cent	0.08	0.00	1.00	0.00	0.27
Ws 0 cent	0.10	0.00	1.00	0.00	0.29
Cohort	3266.64	2029.00	4049.00	3039.00	807.63
Age-squared	1660.00	915.06	2500.00	1660.56	474.41

Table 2: Summary Statistics of Angrist and Lavy (1999) Grade 4 Data

	(1)				
	Mean	Min	Max	Median	SD
Class size	78.40	8.00	225.00	74.00	37.92
Number of boys in class	40.01	0.00	117.00	38.00	20.16
Number of girls in class	38.39	0.00	113.00	37.00	19.67
Number 4th grade classes in school	2.65	1.00	7.00	3.00	1.09
Number of special education classes	2.41	1.00	6.00	2.00	0.94
% failer in grammar	13.72	0.00	88.00	12.00	9.03
Mean mark in grammar	72.55	24.00	90.00	73.00	7.25
Number of pupils in grammar class	68.56	5.00	203.00	65.00	32.96
% failer in math	29.61	0.00	96.77	27.50	15.43
Mean mark in math	68.94	21.00	90.00	69.00	7.93
Number of pupils in math class	69.58	5.00	204.00	66.00	33.35
Class grade	4.00	4.00	4.00	4.00	0.00
Cohort size	75.50	8.00	225.00	70.00	36.87
Number tested mathematics	28.07	5.00	69.00	29.00	6.56
Mathematic score	68.86	21.41	94.09	69.32	8.77
Pass mathematic test	29.87	0.00	96.80	27.76	17.25
Number tested reading	27.65	5.00	69.00	28.00	6.55
Grammar score	72.48	24.29	94.90	73.33	7.99
Pass grammar test	13.90	0.00	88.20	11.80	10.77

Table 3: Summary Statistics of Angrist and Lavy (1999) Grade 5 Data

	(1)				
	Mean	Min	Max	Median	SD
Class size	77.87	5.00	226.00	72.00	39.06
Number of boys in class	39.99	0.00	112.00	37.00	20.89
Number of girls in class	37.88	0.00	114.00	36.00	19.86
Number 4th grade classes in school	2.68	1.00	7.00	3.00	1.12
Number of special education classes	2.40	1.00	6.00	2.00	0.95
% failer in grammar	24.74	0.00	87.50	21.85	12.76
Mean mark in grammar	74.47	35.00	90.00	75.00	7.07
Number of pupils in grammar class	67.36	3.00	200.00	63.00	33.79
% failer in math	25.15	0.00	90.48	22.54	14.91
Mean mark in math	67.42	28.00	93.00	68.00	8.88
Number of pupils in math class	68.32	3.00	201.00	64.00	34.21
Class grade	5.00	5.00	5.00	5.00	0.00
Cohort size	74.36	5.00	217.00	69.00	37.41
Number tested mathematics	27.72	0.00	43.00	28.00	6.68
Mathematic score	67.31	27.69	93.93	67.82	9.60
Pass mathematic test	25.44	0.00	90.50	22.60	16.60
Number tested reading	27.33	3.00	43.00	28.00	6.62
Grammar score	74.40	34.80	93.86	75.43	7.68
Pass grammar test	24.97	0.00	87.50	22.90	14.60

## Task 2B

Table 4: Table IV of Angrist and Krueger (1991)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Years of education	0.080 (0.000)	0.077 (0.015)	0.080 (0.000)	0.131 (0.034)	0.070 (0.000)	1.012 (0.080)	0.070 (0.000)	0.101 (0.034)
Race (1 = black)					-0.298 (0.004)	2.345 (0.187)	-0.298 (0.004)	-0.227 (0.078)
SMSA (1 = center city)					-0.134 (0.003)	0.596 (0.049)	-0.134 (0.003)	-0.116 (0.020)
Married (1 = married)					0.293 (0.004)	-0.410 (0.040)	0.293 (0.004)	0.280 (0.014)
Age (quarterly)			0.145 (0.068)	0.141 (0.070)			0.116 (0.065)	0.117 (0.066)
Age-squared			-0.002 (0.001)	-0.001 (0.001)			-0.001 (0.001)	-0.001 (0.001)
Number of Observations	247,199	247,199	247,199	247,199	247,199	247,199	247,199	247,199
9 year-of-birth dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8 Region of residence dummies	No	Yes	No	Yes	No	Yes	No	Yes
$\chi^2$		103.613		102.663		1116.691		28826.372

Table 5: Table V of Angrist and Krueger (1991)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Years of education	0.071 (0.000)	0.089 (0.016)	0.071 (0.000)	0.076 (0.029)	0.063 (0.000)	1.280 (0.099)	0.063 (0.000)	0.060 (0.029)
Race (1 = black)					-0.257 (0.004)	2.015 (0.159)	-0.257 (0.004)	-0.263 (0.046)
SMSA (1 = center city)					-0.176 (0.003)	1.344 (0.106)	-0.176 (0.003)	-0.180 (0.031)
Married (1 = married)					0.248 (0.003)	-0.290 (0.031)	0.248 (0.003)	0.249 (0.008)
Age (quarterly)			-0.077 (0.062)	-0.080 (0.064)			-0.076 (0.060)	-0.074 (0.062)
Age-squared			0.001 (0.001)	0.001 (0.001)			0.001 (0.001)	0.001 (0.001)
Number of Observations	329,509	329,509	329,509	329,509	329,509	329,509	329,509	329,509
9 year-of-birth dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8 Region of residence dummies	No	Yes	No	Yes	No	Yes	No	Yes
$\chi^2$		40.958		44.213		829.584		24972.221

Table 6: Table VI of Angrist and Krueger (1991)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Years of education	0.057 (0.000)	0.055 (0.014)	0.057 (0.000)	0.095 (0.022)	0.052 (0.000)	0.957 (0.066)	0.052 (0.000)	0.078 (0.024)
Race (1 = black)					-0.211 (0.003)	1.189 (0.083)	-0.211 (0.003)	-0.179 (0.030)
SMSA (1 = center city)					-0.142 (0.002)	0.877 (0.061)	-0.142 (0.002)	-0.118 (0.022)
Married (1 = married)					0.245 (0.002)	0.022 (0.011)	0.244 (0.002)	0.245 (0.003)
Age (quarterly)			0.180 (0.039)	0.133 (0.049)			0.152 (0.038)	0.121 (0.048)
Age-squared			-0.002 (0.001)	-0.002 (0.001)			-0.002 (0.001)	-0.001 (0.001)
Number of Observations	486,926	486,926	486,926	486,926	486,926	486,926	486,926	486,926
9 year-of-birth dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8 Region of residence dummies	No	Yes	No	Yes	No	Yes	No	Yes
$\chi^2$		6921.051		6736.813		2126.858		36292.289

Table 7: OLS Result of Angrist and Krueger (1991) using Programmed Output

	(1)	(2)	(3)	(4)
Years of education	0.082 (0.000)	0.079 (0.000)	0.076 (0.000)	0.071 (0.000)
Race (1 = black)			-0.235 (0.003)	-0.239 (0.003)
SMSA (1 = center city)			-0.210 (0.002)	-0.204 (0.002)
Married (1 = married)			0.223 (0.002)	0.236 (0.002)
Age (quarterly)		0.102 (0.002)		0.093 (0.002)
Age-squared		-0.001 (0.000)		-0.001 (0.000)
Number of Observations	1,063,634	1,063,634	1,063,634	1,063,634
R-squared	0.140	0.150	0.179	0.190