

BERKELEY INITIATIVE FOR TRANSPARENCY IN THE SOCIAL SCIENCES

Combined Regression Results Causal Evidence

Garret Christensen¹ Allan Dafoe² Edward Miguel³

¹Berkeley Institute for Data Science, UC Berkeley

²Department of Political Science, Yale University

³Department of Economics, UC Berkeley

April 2018

PRELIMINARY—Please do not cite.



Thanks to David Birke, Mu Yang Shin, Don Sun, Manana Hakobyan, Terri Cruz, Maxim Guzman, Baiyue Cao, Evey Huang, Rachel Kim, Ravina Pattni, Kevin Khuu, Neil Tagare, Simon Zhu, Jacqueline Wood, Kai Ong, Isabel Zhou

- Naive OLS results
- First stage
- 2SLS
- Exclusion Restriction



Naive OLS Regression						
	(1)	(2)	(3)	(4)		
VARIABLES	Cites	Cites	Cites	Cites		
Data and Code Available	9.987	51.543***	39.973***	48.411***		
	(7.273)	(7.293)	(7.444)	(8.537)		
AER		-120.460***	-116.065***	-131.593***		
		(8.056)	(8.027)	(10.064)		
AJPS		-111.339***	-111.823***	-112.600***		
		(10.843)	(10.770)	(13.334)		
APSR		-99.001***	-91.782***	-91.567***		
		(11.390)	(11.374)	(15.078)		
Months since Pub'd		1.076	1.076	1.881		
		(1.331)	(1.322)	(1.698)		
Months since Pub'd ²		-0.002	-0.002	-0.009		
		(0.012)	(0.012)	(0.015)		
Months since Pub'd ³		0.000	0.000	0.000		
		(0.000)	(0.000)	(0.000)		
No Data in Article			-40.739***			
			(6.041)			
Constant	85.175***	53.439	63.913	23.307		
	(3.050)	(47.793)	(47.493)	(60.656)		
Observations	3,002	3,002	2,999	2,210		
R-squared	0.001	0.147	0.159	0.161		
Sample	All	All	All	Data-Only		

Naive OLS Regression						
	(1)	(2)	(3)	(4)		
VARIABLES	Cites	Cites	Cites	Cites		
Data and Code Available	9.987	51.543***	39.973***	48.411***		
	(7.273)	(7.293)	(7.444)	(8.537)		
AER		-120.460***	-116.065***	-131.593***		
		(8.056)	(8.027)	(10.064)		
AJPS		-111.339***	-111.823***	-112.600***		
		(10.843)	(10.770)	(13.334)		
APSR		-99.001***	-91.782***	-91.567***		
		(11.390)	(11.374)	(15.078)		
Months since Pub'd		1.076	1.076	1.881		
		(1.331)	(1.322)	(1.698)		
Months since Pub'd ²		-0.002	-0.002	-0.009		
		(0.012)	(0.012)	(0.015)		
Months since Pub'd ³		0.000	0.000	0.000		
		(0.000)	(0.000)	(0.000)		
No Data in Article			-40.739***			
			(6.041)			
Constant	85.175***	53.439	63.913	23.307		
	(3.050)	(47.793)	(47.493)	(60.656)		
Observations	3,002	3,002	2,999	2,210		
R-squared	0.001	0.147	0.159	0.161		
Sample	All	All	All	Data-Only		

Naive OLS Regression					
	(1)	(2)	(3)	(4)	
VARIABLES	Cites	Cites	Cites	Cites	
Data and Code Available	9.987	50.938***	39.506***	47.474***	
	(7.273)	(7.314)	(7.466)	(8.577)	
AER		-120.129***	-115.751***	-131.048***	
		(8.066)	(8.038)	(10.092)	
AJPS		-168.016***	-165.733***	-187.757***	
		(17.630)	(17.517)	(22.034)	
APSR		-156.125***	-146.573***	-167.978***	
		(17.802)	(17.742)	(22.656)	
2001b.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2001b.year#1.econ		109.594***	110.134***	144.505***	
		(13.142)	(13.054)	(17.472)	
2002o.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2002.year#1.econ		87.419***	87.735***	111.725***	
		(12.840)	(12.754)	(17.004)	
2003o.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2003.year#1.econ		87.329***	83.181***	96.332***	
		(12.754)	(12.683)	(16.198)	
2004o.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2004.year#1.econ		70.913***	69.310***	82.868***	

車▶▲車▶ 車 釣魚@

Results

Naive OLS Regression						
	(1)	(2)	(3)	(4)		
VARIABLES	Cites	Cites	Cites	Cites		
avail_data	32.981***	66.702***	56.310***	64.644***		
	(6.415)	(6.403)	(6.646)	(7.610)		
AER		-118.736***	-115.393***	-130.622***		
		(7.980)	(7.967)	(9.968)		
AJPS		-109.664***	-110.354***	-109.964***		
		(10.737)	(10.693)	(13.220)		
APSR		-92.202***	-87.006***	-84.833***		
		(11.314)	(11.314)	(14.979)		
Months since Pub'd		1.219	1.223	2.096		
		(1.316)	(1.310)	(1.679)		
Months since Pub'd ²		-0.003	-0.003	-0.010		
		(0.012)	(0.012)	(0.015)		
Months since Pub'd ³		0.000	0.000	0.000		
		(0.000)	(0.000)	(0.000)		
No Data in Article			-33.643***			
			(6.085)			
Constant	77.779***	33.591	43.462	-2.050		
	(3.086)	(47.191)	(47.020)	(59.868)		
Observations	3.069	3,002	2,999	2,210		
R-squared	0.009	0.163	0.171	0.176		
Sample	All	All	All	Data-Only		
Odinpio		rors in parenth		Data-Only		
	Olandalu Cl	iois iii pareiiti	10000			

Naive OLS Regression					
	(1) (2) (3) (4)				
VARIABLES	Cites	Cites	Cites	Cites	
avail_data	32.981***	66.169***	55.931***	63.714***	
	(6.415)	(6.414)	(6.659)	(7.632)	
AER		-118.431***	-115.107***	-130.045***	
		(7.990)	(7.979)	(9.998)	
AJPS		-169.543***	-168.117***	-189.825***	
		(17.320)	(17.249)	(21.606)	
APSR		-152.555***	-145.631***	-165.964***	
		(17.561)	(17.534)	(22.313)	
2001b.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2001b.year#1.econ		116.199***	115.917***	152.731***	
		(13.041)	(12.985)	(17.358)	
2002o.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2002.year#1.econ		93.256***	92.883***	118.860***	
		(12.736)	(12.681)	(16.883)	
2003o.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2003.year#1.econ		92.430***	88.477***	103.135***	
		(12.645)	(12.611)	(16.082)	
2004o.year#0b.econ		0.000	0.000	0.000	
		(0.000)	(0.000)	(0.000)	
2004.year#1.econ		73.409***	71.916***	86.294***	

Naive OLO negression	Naive	OLS	Regression
----------------------	-------	-----	------------

	(1)	(2)	(3)	(4)
VARIABLES	Cites	Cites	Cites	Cites
Data and Code Available	9.987	51.543***	39.973***	48.411***
	(7.273)	(7.293)	(7.444)	(8.537)
AER		-120.460***	-116.065***	-131.593***
		(8.056)	(8.027)	(10.064)
AJPS		-111.339***	-111.823***	-112.600***
		(10.843)	(10.770)	(13.334)
APSR		-99.001***	-91.782***	-91.567***
		(11.390)	(11.374)	(15.078)
No Data in Article			-40.739***	
			(6.041)	
Observations	3,002	3,002	2,999	2,210
R-squared	0.001	0.147	0.159	0.161
Sample	All	All	All	Data-Only

*** p<0.01, ** p<0.05, * p<0.1

Regressions include constant, squared and cubed months since publication.



Naive OLS Regression								
	(1) (2) (3) (4)							
VARIABLES	Cites	Cites	Cites	Cites				
Data and Code Available	9.987	50.938***	39.506***	47.474***				
	(7.273)	(7.314)	(7.466)	(8.577)				
AER		-120.129***	-115.751***	-131.048***				
		(8.066)	(8.038)	(10.092)				
AJPS		-168.016***	-165.733***	-187.757***				
		(17.630)	(17.517)	(22.034)				
APSR		-156.125***	-146.573***	-167.978***				
		(17.802)	(17.742)	(22.656)				
2009o.year#1o.econ		0.000	0.000	0.000				
		(0.000)	(0.000)	(0.000)				
2014o.year#0b.econ		0.000	0.000	0.000				
		(0.000)	(0.000)	(0.000)				
No Data in Article			-40.474***					
			(6.090)					
Observations	3,002	3,002	2,999	2,210				
R-squared	0.001	0.149	0.161	0.163				
Sample	All	All	All	Data-Only				

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Regressions include constant, squared and cubed months since publication.



Naive OLS Regression

	(1)	(2)	(3)	(4)
VARIABLES	Cites	Cites	Cites	Cites
avail_data	32.981***	66.702***	56.310***	64.644***
	(6.415)	(6.403)	(6.646)	(7.610)
AER		-118.736***	-115.393***	-130.622***
		(7.980)	(7.967)	(9.968)
AJPS		-109.664***	-110.354***	-109.964***
		(10.737)	(10.693)	(13.220)
APSR		-92.202***	-87.006***	-84.833***
		(11.314)	(11.314)	(14.979)
No Data in Article			-33.643***	
			(6.085)	
Ob	0.000	0.000	0.000	0.010
Observations	3,069	3,002	2,999	2,210
R-squared	0.009	0.163	0.171	0.176
Sample	All	All	All	Data-Only
	Standar	d arrore in nar	onthococ	

*** p<0.01, ** p<0.05, * p<0.1

Regressions include constant, squared and cubed months since publication.



	Naive (OLS Regression	on	
	(1)	(2)	(3)	(4)
VARIABLES	Cites	Cites	Cites	Cites
avail_data	32.981***	66.169***	55.931***	63.714***
	(6.415)	(6.414)	(6.659)	(7.632)
AER		-118.431***	-115.107***	-130.045***
		(7.990)	(7.979)	(9.998)
AJPS		-169.543***	-168.117***	-189.825***
		(17.320)	(17.249)	(21.606)
APSR		-152.555***	-145.631***	-165.964***
		(17.561)	(17.534)	(22.313)
2009o.year#1o.econ		0.000	0.000	0.000
		(0.000)	(0.000)	(0.000)
2014o.year#0b.econ		0.000	0.000	0.000
		(0.000)	(0.000)	(0.000)
No Data in Article			-33.315***	
			(6.135)	
Observations	3,069	3,002	2,999	2,210
R-squared	0.009	0.165	0.173	0.177
Sample	All	All	All	Data-Only
	Standard a	rrore in parant	honon	

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1



	Naive OLS	Regression		
	(1)	(2)	(3)	(4)
VARIABLES	Ln(Cites+1)	Ln(Cites+1)	Ln(Cites+1)	Ln(Cites+1)
Data and Code Available	0.261***	0.764***	0.574***	0.595***
	(0.063)	(0.061)	(0.060)	(0.059)
AER		-1.191***	-1.120***	-1.134***
		(0.067)	(0.065)	(0.069)
AJPS		-0.906***	-0.916***	-0.829***
		(0.090)	(0.087)	(0.091)
APSR		-0.726***	-0.600***	-0.440***
		(0.095)	(0.092)	(0.103)
Months since Pub'd		0.064***	0.064***	0.076***
		(0.011)	(0.011)	(0.012)
No Data in Article			-0.655***	
			(0.049)	
Observations	3,002	3,002	2,999	2,210
R-squared	0.006	0.218	0.262	0.255
Sample	All	All	All	Data-Only

	(1)	(2)	(3)
VARIABLES	First Stage	First Stage	First Stage
AER post-2005 Policy	0.047	0.074	0.112**
	(0.039)	(0.056)	(0.050)
AJPS post-2010 Policy	0.196***	0.250**	0.220***
	(0.058)	(0.118)	(0.077)
AJPS post-2012 Policy	0.266***	-0.314**	0.288***
	(0.065)	(0.148)	(0.083)
Observations	3,123	3,118	2,238
R-squared	0.174	0.246	0.195
Sample	All	IV=Data-Only	Data-Only
F Stat	27.67	13.97	20.54

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Controls cut for space



	2SLS Regress	ion	
	(1)	(2)	(3)
VARIABLES	2SLS	2SLS	2SLS
Data and Code Available	18.362	20.128	94.212*
	(44.688)	(37.725)	(51.734)
AER	-119.611***	-116.700***	-133.213***
	(8.083)	(8.109)	(10.379)
AJPS	-112.786***	-110.504***	-119.329***
	(31.758)	(31.383)	(38.715)
APSR	-106.728***	-95.255***	-90.197**
	(32.073)	(31.577)	(39.872)
Post-Mar 2005	-31.531**	30.927*	-30.192*
	(12.663)	(16.945)	(16.399)
Post-2005 with Data		-73.513***	
		(15.879)	
Post-Oct 2010	-3.162	17.291	-1.049
	(16.553)	(28.710)	(20.791)
Post-2010 with Data		-26.449	
		(29.504)	
Post-July 2012	-0.259	5.808	-6.046
	(22.629)	(31.977)	(27.430)
Post-2012 with Data		-5.256	
		(27.305)	
No Data in Article		-120.641***	
		(20.167)	

	2SLS Regressi	ion									
	(1)	(2)	(3)								
VARIABLES	2SLS	2SLS	2SLS								
Data and Code Available	14.011	16.675	90.180*								
	(44.578)	(38.394)	(52.857)								
AER	-119.193***	-116.182***	-132.455***								
	(8.090)	(8.122)	(10.381)								
AJPS	-151.221***	-154.523***	-211.069***								
	(26.611)	(24.068)	(36.106)								
APSR	-145.983***	-140.066***	-182.668***								
	(20.965)	(20.525)	(29.729)								
Post-Mar 2005	-43.278*	21.212	-41.589								
	(25.621)	(28.237)	(31.019)								
Post-2005 with Data		-72.401***									
		(15.934)									
Post-Oct 2010	-14.620	5.779	-33.848								
	(45.928)	(50.075)	(59.706)								
Post-2010 with Data		-27.022									
		(30.243)									
Post-July 2012	-7.090	-3.431	-12.575								
	(28.136)	(37.089)	(33.849)								
Post-2012 with Data		-4.955									
		(27.530)									
2009o.year#1o.econ	0.000	0.000	0.000								
•	(0.000)	(0.000)	(0.000)								
2014o.year#0b.econ	0.000	0.000	0.000	◆● → ◆ = → ◆	← □ → ← □ → ← □ → □ → □ → □ → □ → □ → □	⟨□⟩ ⟨∃⟩ ⟨∃⟩ ∃	←□→←□→←□→ □□		◆□ → ← = → ← = → ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	◆□ → ← □ → ← □ → ○ へ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	◆ □ ▶ ◆ 重 ▶ ◆ 重 → 9 Q O

2SLS Regression					
	(1)	(2)	(3)		
VARIABLES	2SLS	2SLS	2SLS		
avail_data	32.686	29.679	108.204**		
	(41.539)	(36.022)	(45.246)		
AER	-118.867***	-116.456***	-131.005***		
	(8.028)	(7.962)	(10.061)		
AJPS	-114.162***	-111.425***	-122.446***		
	(31.550)	(31.228)	(38.433)		
APSR	-104.172***	-94.241***	-88.575**		
	(31.835)	(31.338)	(39.253)		
Post-Mar 2005	-30.324**	33.883*	-26.875*		
	(12.584)	(17.478)	(16.133)		
Post-2005 with Data		-76.446***			
		(16.112)			
Post-Oct 2010	-5.367	17.543	-11.406		
	(16.514)	(28.438)	(20.421)		
Post-2010 with Data		-29.361			
		(29.684)			
Post-July 2012	-0.204	5.399	-4.113		
	(22.369)	(31.771)	(27.092)		
Post-2012 with Data		-4.591			
		(26.966)			
No Data in Article		-120.700***			
		(19.822)			

2SLS Regression					
	(1)	(2)	(3)		
VARIABLES	2SLS	2SLS	2SLS		
avail_data	26.184	25.169	99.822**		
	(41.070)	(36.314)	(45.343)		
AER	-118.655***	-116.039***	-130.388***		
	(8.036)	(7.979)	(10.049)		
AJPS	-154.656***	-156.115***	-205.842***		
	(23.056)	(21.360)	(29.313)		
APSR	-146.167***	-139.979***	-173.852***		
	(18.536)	(18.633)	(24.874)		
Post-Mar 2005	-38.004	27.863	-24.314		
	(26.856)	(30.564)	(31.673)		
Post-2005 with Data		-75.011***			
		(16.173)			
Post-Oct 2010	-16.412	6.460	-33.747		
	(45.424)	(49.724)	(58.582)		
Post-2010 with Data		-29.350			
		(30.380)			
Post-July 2012	-6.311	-3.244	-8.831		
	(27.919)	(36.890)	(33.427)		
Post-2012 with Data		-4.452			
		(27.281)			
2009o.year#1o.econ	0.000	0.000	0.000		
	(0.000)	(0.000)	(0.000)		
2014o.year#0b.econ	0.000	0.000	0.000		

2SLS Regression					
	(1)	(2)	(3)		
VARIABLES	2SLS	2SLS	2SLS		
Data and Code Available	18.362	20.128	94.212*		
	(44.688)	(37.725)	(51.734)		
AER	-119.611***	-116.700***	-133.213***		
	(8.083)	(8.109)	(10.379)		
AJPS	-112.786***	-110.504***	-119.329***		
	(31.758)	(31.383)	(38.715)		
APSR	-106.728***	-95.255***	-90.197**		
	(32.073)	(31.577)	(39.872)		
Months since Pub'd	1.275	1.665	3.297		
	(2.459)	(2.409)	(3.158)		
No Data in Article		-120.641***			
		(20.167)			
Observations	3,002	2,999	2,210		
R-squared	0.143	0.167	0.152		
Sample	All	IV=Data-Only	Data-Only		

^{***} p<0.01, ** p<0.05, * p<0.1

2SLS Reg	2SLS Regression of In(citations+1)						
	(1)	(2)	(3)				
VARIABLES	2SLS-Log	2SLS-Log	2SLS-Log				
Data and Code Available	-0.139	0.213	0.389				
	(0.383)	(0.308)	(0.353)				
AER	-1.177***	-1.118***	-1.121***				
	(0.069)	(0.066)	(0.071)				
AJPS	-0.729***	-0.689***	-0.877***				
	(0.272)	(0.256)	(0.264)				
APSR	-0.733***	-0.381	-0.524*				
	(0.275)	(0.258)	(0.272)				
Post-Mar 2005	-0.197*	-0.007	-0.144				
	(0.109)	(0.138)	(0.112)				
Post-Oct 2010	0.089	0.448*	-0.069				
	(0.142)	(0.234)	(0.142)				
Post-July 2012	0.061	0.178	0.012				
•	(0.194)	(0.261)	(0.187)				
Post-2005 with Data		-0.121					
		(0.130)					
Post-2010 with Data		-0.412*					
		(0.241)					
Post-2012 with Data		-0.104					
		(0.223)					
Months since Pub'd	0.062***	0.072***	0.073***				
	(0.021)	(0.020)	(0.022)				
No Data in Article	, ,	-1.234***	, ,				
		(0.165)					
		, ,					
Observations	3,002	2,999	2,210				
R-squared	0.161	0.257	0.252				
Sample	All	IV=Data-Only	Data-Only				
Standard	d errors in pa	rentheses					



^{***} p<0.01, ** p<0.05, * p<0.1

2SLS Regress	ion of In	(citations+1)
	(1)	(2)

	(1)	(2)	(3)				
VARIABLES	2SLS-Log	2SLS-Log	2SLS-Log				
Data and Code Available	-0.139	0.213	0.389				
	(0.383)	(0.308)	(0.353)				
AER	-1.177***	-1.118***	-1.121***				
	(0.069)	(0.066)	(0.071)				
AJPS	-0.729***	-0.689***	-0.877***				
	(0.272)	(0.256)	(0.264)				
APSR	-0.733***	-0.381	-0.524*				
	(0.275)	(0.258)	(0.272)				
Months since Pub'd	0.062***	0.072***	0.073***				
	(0.021)	(0.020)	(0.022)				
No Data in Article		-1.234***					
		(0.165)					
Observations	3,002	2,999	2,210				
R-squared	0.161	0.257	0.252				
Sample	All	IV=Data-Only	Data-Only				
Chandand amana in nametheras							

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Christensen, Dafoe, Miguel

	(1)	(2)	(3)	(4)	(5)
VARIABLES	Experimental	Observational	Top 10	Top 20	Top 50
AER post-2005 Policy	0.060	-0.076*	-0.127***	-0.084*	-0.001
	(0.042)	(0.046)	(0.041)	(0.046)	(0.048)
AJPS post-2010 Policy	0.098	-0.096	0.070	0.086	0.067
	(0.065)	(0.070)	(0.064)	(0.071)	(0.074)
AJPS post-2012 Policy	-0.102	0.089	0.012	0.005	0.065
	(0.070)	(0.076)	(0.069)	(0.077)	(0.080)
Observations	2,238	2.238	2.231	2.231	2.231
R-squared	0.015	0.011	0.017	0.009	0.075
Sample	Data-Only	Data-Only	Data-Only	Data-Only	Data-Only

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Controls dropped for space

