Replication by Kareena Satia

Paper: The Colonial Origins of Comparative Development: An Empirical Investigation Author(s): Daron Acemoglu, Simon Johnson, James A. Robinson

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TABLE 1—DESCRIPTIVE STATISTICS

			В	By quartiles	of mortality		
•	Whole world	Base sample	(1)	(2)	(3)	(4)	
Log GDP per capita (PPP) in 1995	8.303	8.062	8.888	8.408	7.778	7.199	
	(1.105)	(1.043)	(1.290)	(0.639)	(0.802)	(0.626)	
Log output per worker in 1988 (with level of United States normalized to 1)	-1.731	-1.934	-1.025	-1.463	-2.195	-3.026	
	(1.084)	(0.981)	(0.861)	(0.422)	(0.801)	(0.477)	
Average protection against expropriation risk, 1985-1995	7.066	6.516	7.904	6.468	5.973	5.891	
	(1.804)	(1.469)	(1.548)	(0.954)	(1.320)	(1.296)	
Constraint on executive in 1990	3.636	3.967	5.333	5.118	3.313	2.267	
	(2.340)	(2.262)	(2.103)	(1.799)	(2.182)	(1.580)	
Constraint on executive in 1900	1.857	2.250	3.667	3.278	1.125	1	
	(1.823)	(2.112)	(2.995)	(2.109)	(0.500)	(0)	
Constraint on executive in first year of independence	3.591	3.400	5.167	2.444	3.125	3.429	
	(2.415)	(2.395)	(2.758)	(1.917)	(2.277)	(2.138)	
Democracy in 1900	1.149	1.644	3.917	2.765	0.188	0	
	(2.577)	(3.004)	(4.582)	(2.905)	(0.403)	(0)	
European settlements in 1900	30.47	16.18	31.73	25.56	8.171	0.533	
	(42.39)	(25.53)	(43.92)	(17.98)	(11.80)	(2.066)	
Log European settler mortality	4.596	4.657	3.009	4.283	4.919	6.347	
	(1.303)	(1.258)	(0.593)	(0.0500)	(0.401)	(0.754)	
Number of observations	163	64	14	18	17	15	

TABLE 2—OLS REGRESSIONS

	Whole world (1)	Base sample (2)	Whole world (3)	Base sample (4)	Whole world (5)	Base sample (6)	Whole world (7)	Base sample (8)
•		Dependent variable is log output per worker in 1998						
Average protection	0.53	0.52	0.46	0.47	0.39	0.40	0.45	0.46
against expropriation risk, 1985-1995	(0.03)	(0.05)	(0.05)	(0.06)	(0.05)	(0.06)	(0.03)	(0.05)
Latitude			0.87	1.58	0.33	0.88		
			(0.50)	(0.65)	(0.44)	(0.61)		
Asia dummy					-0.15	-0.58		
					(0.18)	(0.30)		
Africa dummy					-0.92	-0.88		
					(0.15)	(0.16)		
"Other" continent dummy					0.30	0.11		
·					(0.17)	(0.22)		
R^2	0.61	0.54	0.62	0.57	0.72	0.71	0.55	0.49
Number of observations	111	64	111	64	111	64	108	61

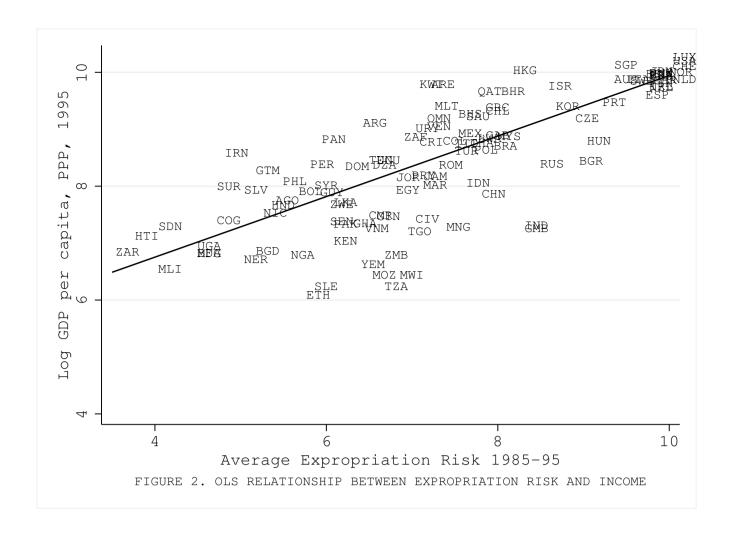


TABLE 3—DETERMINANTS OF INSTITUTIONS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Panel A	Dependent Variable Is Average Protection Against Expropriation Risk in 1985-1995									95	
Constraint on executive	0.32	0.26									
in 1900	(0.08)	(0.09)									
Democracy in 1900			0.24 (0.06)	0.21 (0.07)							
Constraint on executive in first					0.25	0.22					
year of independence					(0.08)	(0.08)					
European settlements in 1900							3.18 (0.61)	3.00 (0.78)			
Log European settler mortality									-0.61 (0.13)	-0.51 (0.14)	
Latitude		2.18		1.55		2.72		0.58	()	2.00	
		(1.42)		(1.47)		(1.43)		(1.51)		(1.34)	
R^2	0.2	0.23	0.24	0.25	0.19	0.24	0.3	0.3	0.27	0.3	
Number of observations	63	63	62	62	63	63	66	66	64	64	
									Varia	endent able Is opean	
			able is Cor						Settlements in		
Panel B		on Execut	ive in 1900	<u> </u>		Democra	cy in 1900		19	000	
European settlements in 1900	5.49	5.39			8.57	8.06					
-	(0.73)	(0.93)			(0.93)	(1.19)					
Log European settler mortality			-0.82	-0.65			-1.22	-0.88	-0.11	-0.07	
			(0.17)	(0.18)			(0.24)	(0.25)	(0.02)	(0.02)	
Latitude		0.33		3.63		1.61		7.57		0.87	
		(1.81)		(1.72)		(2.32)		(2.42)		(0.19)	
R^2	0.46	0.46	0.25	0.29	0.57	0.57	0.28	0.37	0.31	0.47	
Number of observations	70	70	75	75	67	67	68	68	73	73	

TABLE 4—IV REGRESSIONS OF LOG GDP PER CAPITA

	Base sample (1)	Base sample (2)	Base sample without Neo-Europes (3)	Base sample without Neo-Europes (4)	Base sample without Africa (5)	Base sample without Africa (6)	Base sample with continent dummies (7)	Base sample with continent dummies (8)	Base sample, dependent variable is log output per worker (9)
			Panel A: Two	-Stage Least Squa	res				
Average protection against expropriation risk 1985-1995 Latitude Asia dummy	0.94 (0.15)	1.00 (0.22) -0.65 (1.30)	1.28 (0.35)	1.21 (0.35) 0.94 (1.43)	0.58 (0.10)	0.58 (0.11) 0.04 (0.80)	0.98 (0.29) -0.92	1.11 (0.44) -1.18 (1.67) -1.05	0.98 (0.17)
Africa dummy							(0.38) -0.46 (0.34)	(0.50) -0.44 (0.40)	
"Other" continent dummy							-0.94 (0.81)	-0.99 (0.95)	
Log European settler mortality	-0.61	-0.51	For Average Protection -0.39	-0.39	-1.21	-1.14	-0.43	-0.34	-0.61
Latitude	(0.13)	(0.14) 2.00 (1.34)	(0.13)	(0.14) -0.11 (1.49)	(0.22)	(0.24) 0.99 (1.43)	(0.17)	(0.18) 2.01 (1.39)	(0.13)
Asia dummy Africa dummy							0.33 (0.50) -0.27	0.47 (0.50) -0.26	
"Other" continent dummy							(0.41) 1.24 (0.84)	(0.41) 1.06 (0.84)	
R^2	0.27	0.30	0.13	0.13	0.47	0.47	0.30	0.33	0.27
Average protection against expropriation risk 1985-1995 Number of observations	0.52 (0.06) 64	0.47 (0.06) 64	Panel C: Ord 0.49 (0.08) 60	inary Least Squar 0.47 (0.07) 60	0.48 (0.07) 37	0.47 (0.07) 37	0.42 (0.06) 64	0.40 (0.06) 64	0.46 (0.06) 61

```
*Name: Kareena Satia
 2
     *Paper: The Colonial Origins of Comparative Development: An Empirical Investigation
3
     *Author(s): Daron Acemoglu, Simon Johnson, James A. Robinson
4
5
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6
7
     *Stable URL: http://www.jstor.org/stable/2677930
8
9
     *The following codes attempt to replicate some of the important results from the paper.
10
     *******TABLE 1 - DESCRIPTIVE STATISTICS*********
11
12
13
     clear
     use "C:\Users\18575\Downloads\Programming\Replication\table1.dta"
14
15
     label var euro1900 "European settlements in 1900"
16
17
     label var avexpr "Average protection against expropriation risk, 1985-1995"
18
     label var logpgp95 "Log GDP per capita (PPP) in 1995"
     label var cons1 "Constraint on executive in first year of independence"
19
     label var cons90 "Constraint on executive in 1990"
20
     label var democ00a "Democracy in 1900"
21
     label var cons00a "Constraint on executive in 1900"
22
     label var logem4 "Log European settler mortality'
23
     label var loghjypl "Log output per worker in 1988 (with level of United States normalized to 1)"
24
25
     *Column 1 - Whole world*
26
27
     estpost sum logpgp95 loghjypl avexpr cons90 cons00a cons1 democ00a euro1900 logem4
     eststo m1
28
29
30
31
     keep if baseco==1
32
33
     *Column 2 - Base sample*
34
     estpost sum logpgp95 loghjypl avexpr cons90 cons00a cons1 democ00a euro1900 logem4
     eststo m2
35
     drop if extmort4== .
36
37
     drop if logpgp95 == .
38
     drop if avexpr == .
39
     drop if excolony == 0
40
     *Columns 3 - 6 (quartiles of mortality)
41
     estpost sum euro1900 avexpr logpgp95 cons1 cons90 democ00a cons00a logem4 loghjypl if extmort4 < 65.4
42
43
     eststo q1
     estpost sum euro1900 avexpr logpgp95 cons1 cons90 democ00a cons00a logem4 loghjypl if extmort4 >=
     65.4 & extmort4 < 78.1
45
     eststo q2
46
     estpost sum euro1900 avexpr logpgp95 cons1 cons90 democ00a cons00a logem4 loghjypl if extmort4 >=
     78.1 & extmort4 < 280
47
     estpost sum euro1900 avexpr logpgp95 cons1 cons90 democ00a cons00a logem4 loghjypl if extmort4 >= 280
48
49
     eststo q4
50
51
     *Latex export*
     esttab m1 m2 q1 q2 q3 q4 using desc1, booktabs style(tex) label nostar main(mean) aux(sd) nonumbers
52
     replace
53
     ******FIGURE 2 - OLS GRAPH************
54
55
56
     clear
57
     use "C:\Users\18575\Downloads\Programming\Replication\table2.dta"
58
59
     graph set window fontface "Times New Roman"
60
```

```
*OLS graph
 61
 62
      graph twoway scatter logpgp95 avexpr if !missing(logpgp95, avexpr), mlabel(shortham) mcolor(white)
      msize(0) mlabcolor(black) || lfit logpgp95 avexpr, ylabel(4(2)10) ytitle("Log GDP per capita, PPP,
      1995") xtitle("Average Expropriation Risk 1985-95") lcolor(black) legend(off) b1title("FIGURE 2. OLS
      RELATIONSHIP BETWEEN EXPROPRIATION RISK AND INCOME", size(small)) plotregion(fcolor(white))
      graphregion(fcolor(white))
 63
      *Latex export graph
 64
      graph export filename, as(eps) preview(off) replace
 65
      !epstopdf filename
 66
 67
 68
 69
      *****TABLE 2 - OLS REGRESSION******
 70
 71
      clear
 72
      use "C:\Users\18575\Downloads\Programming\Replication\table2.dta"
 73
 74
      *Label variables*
      label var avexpr "Average protection against expropriation risk, 1985-1995"
 75
      label var lat_abst "Latitude"
 76
 77
      label var asia "Asia dummy
      label var africa "Africa dummty"
 78
 79
      label var other "Other continent dummy"
 80
 81
      *Column 1 - Whole world
      reg logpgp95 avexpr, robust
 82
 83
      outreg2 using myfile, replace bdec(2) sdec(2) rdec(2) noaster
 84
 85
      *Column 2- Base sample
 86
      reg logpgp95 avexpr if baseco == 1, robust
 87
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
 88
      *Column 3 - Whole world
 89
 90
      reg logpgp95 avexpr lat abst, robust
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
 91
 92
 93
      *Column 4 - Base sample
 94
      reg logpgp95 avexpr lat_abst if baseco == 1, robust
 95
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
 96
 97
      *Column 5 - Whole world
 98
      reg logpgp95 avexpr lat_abst asia africa other, robust
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
 99
100
101
      *Column 6 - Base sample
102
      reg logpgp95 avexpr lat abst asia africa other if baseco == 1, robust
103
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
104
105
      *Column 7 - Whole world
      reg loghjypl avexpr, robust
106
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
107
108
109
      *Column 8 - Base sample
      reg loghjypl avexpr if baseco == 1, robust
110
111
      outreg2 using myfile, append tex bdec(2) sdec(2) rdec(2) noaster
112
113
      ****TABLE 3 - DETERMINANTS OF INSTITUTIONS*****
114
115
      clear
      use "C:\Users\18575\Downloads\Programming\Replication\table3.dta"
116
117
118
      keep if excolony==1
119
      keep if extmort4!=.
```

```
120
      gen euro19 = euro1900/100
121
122
      *Panel A*
123
124
      *Column 1
125
      reg avexpr cons00a
126
      outreg2 using table3, replace bdec(2) sdec(2) noaster
127
128
      *Column 2
129
      reg avexpr lat_abst cons00a
130
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
131
132
      *Column 3
133
      reg avexpr democ00a
134
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
135
136
      *Column 4
137
      reg avexpr democ00a lat_abst
138
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
139
140
      *Column 5
141
      reg avexpr indtime cons1
142
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
143
144
      *Column 6
      reg avexpr indtime cons1 lat_abst
145
146
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
147
148
      *Column 7
149
      reg avexpr euro19
150
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
151
      *Column 8
152
153
      reg avexpr euro19 lat abst
154
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
155
156
      *Column 9
157
      reg avexpr logem4 if logpgp95!=.
158
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
159
160
      *Column 10
161
      reg avexpr logem4 lat_abst if logpgp95!=.
162
      outreg2 using table3, append tex bdec(2) sdec(2) noaster
163
164
      *****Panel B*****
165
166
167
      *Column 1
168
      reg cons00a euro19 if logpgp95~=.
169
      outreg2 using panelb, replace bdec(2) sdec(2) noaster
170
171
      *Column 2
172
      reg cons00a euro19 lat_abst if logpgp95!=.
173
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
174
175
      *Column 3
176
      reg cons00a logem4
177
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
178
      *Column 4
179
180
      reg cons00a lat_abst logem4
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
181
182
```

```
183
      *Column 5
184
      reg democ00a euro19 if logpgp95!=.
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
185
186
187
      *Column 6
188
      reg democ00a lat_abst euro19 if logpgp95!=.
189
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
190
191
      *Column 7
      reg democ00a logem4 if logpgp95!=.
192
193
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
194
195
      *Column 8
      reg democ00a lat_abst logem4 if logpgp95!=.
196
197
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
198
199
      *Column 9
200
      reg euro19 logem4 if logpgp95!=.
201
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
202
203
      *Column 10
204
      reg euro19 lat_abst logem4 if logpgp95!=.
205
      outreg2 using panelb, append tex bdec(2) sdec(2) noaster
206
207
      *****TABLE 4 - IV REGRESSION******
208
209
210
      clear
211
      use "C:\Users\18575\Downloads\Programming\Replication\table4.dta"
212
213
      *Label Variables*
214
215
      label var avexpr "Average protection against expropriation risk, 1985-1995"
216
      label var lat abst "Latitude"
217
      label var asia "Asia dummy"
      label var africa "Africa dummy"
218
219
220
      keep if baseco == 1
221
222
      *PANEL A - 2SLS*
223
224
      *Column 1
225
      ivregress 2sls logpgp95 (avexpr=logem4)
226
      outreg2 using IV, replace bdec(2) sdec(2) rdec(2) noaster
227
228
      *Column 2
229
      ivregress 2sls logpgp95 (avexpr=logem4) lat_abst
230
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
231
232
      *Column 3
233
      ivregress 2sls logpgp95 (avexpr=logem4) if rich4!=1
234
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
235
      *Column 4
236
237
      ivregress 2sls logpgp95 (avexpr=logem4) lat_abst if rich4!=1
238
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
239
      *Columns 5
240
241
      ivregress 2sls logpgp95 (avexpr=logem4) if africa!=1
242
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
243
244
      *Column 6
245
      ivregress 2sls logpgp95 (avexpr=logem4) lat abst if africa!=1
```

```
outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
247
      gen othercontdum=0
248
      replace othercontdum=1 if (shortnam=="AUS" | shortnam=="MLT" | shortnam=="NZL")
249
250
      label var othercontdum "Other continent dummy"
251
252
      *Column 7
253
      ivregress 2sls logpgp95 (avexpr=logem4) africa asia othercontdum
254
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
255
256
      *Column 8*
257
      ivregress 2sls logpgp95 lat_abst (avexpr=logem4) africa asia othercontdum
258
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
259
      *Column 9
260
261
      ivregress 2sls loghjypl (avexpr=logem4)
262
      outreg2 using IV, append tex bdec(2) sdec(2) rdec(2) noaster
263
      *PANEL B - FIRST STAGE*
264
265
266
      *Column 1*
267
      reg avexpr <u>logem4</u>
268
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
269
270
      *Column 2*
271
      reg avexpr logem4 lat_abst
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
272
273
274
      *Column 3*
275
      reg avexpr logem4 if rich4!=1
276
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
277
278
      *Column 4*
279
      reg avexpr logem4 lat abst if rich4!=1
280
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
281
282
      *Columns 5
283
      reg avexpr logem4 if africa!=1
284
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
285
286
      *Column 6
287
      reg avexpr logem4 lat_abst if africa!=1
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
288
289
290
      *Columns 7
291
      reg avexpr logem4 africa asia othercontdum
292
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
293
294
      *Column 8*
295
      reg avexpr logem4 lat abst africa asia othercontdum
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
296
297
298
      *Column 9
299
      reg avexpr logem4
300
      outreg2 using panelb1, append tex bdec(2) sdec(2) rdec(2) noaster
301
302
      *Panel C - OLS*
303
304
      *Column 1
305
      reg logpgp95 avexpr
306
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
307
308
      *Columm 2
```

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```
reg logpgp95 lat_abst avexpr
310
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
311
312
      *Column 3
      reg logpgp95 avexpr if rich4!=1
313
314
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
315
      *Columm 4
316
317
      reg logpgp95 lat abst avexpr if rich4!=1
318
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
319
320
      *Column 5
321
      reg logpgp95 avexpr if africa!=1
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
322
323
324
      *Columm 6
      reg logpgp95 lat_abst avexpr if africa!=1
325
326
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
327
328
      *Column 7
329
      reg logpgp95 avexpr africa asia othercontdum
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
330
331
332
      *Columm 8
333
      reg logpgp95 lat_abst avexpr africa asia othercontdum
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
334
335
      *Column 9
336
337
      reg loghjypl avexpr
338
      outreg2 using OLS, append tex bdec(2) sdec(2) rdec(2) noaster
339
340
```

341