  ___ ____ ____ ____ ____(R)
 /__   /   ____/   /   ____/
___/   /   /___/   /   /___/
  Statistics/Data Analysis

    User: David Kaufmann

```
  log type:  smcl
      name:  <unnamed>
       log:  \\d.ethz.ch\groups\baug\irl\spur_kadavid\Publikationen\4 Sanctuary cities in Europe\01_Paper\Stata\Sanc
> ope.smcl
  log type:  smcl
 opened on:  25 May 2021, 12:18:53

 1 .
 2 .
 3 .
 4 . cd "\\d.ethz.ch\groups\baug\irl\spur_kadavid\Publikationen\4 Sanctuary cities in Europe\01_Paper\Stata"
   \\d.ethz.ch\groups\baug\irl\spur_kadavid\Publikationen\4 Sanctuary cities in Europe\01_Paper\Stata

 5 .
 6 .
 7 .
 8 . clear

 9 . insheet using basic.csv, c
   (17 vars, 95 obs)

10 . save basic.dta, replace
   file basic.dta saved

11 . clear

12 . use basic.dta

13 .
14 .
15 . ****************************************************************
16 . *** 1. Descriptive statistics***************************************
17 . ****************************************************************
18 .
19 . recode nothing (0=1) (1=0), gen(policy)
   (95 differences between nothing and policy)

20 .
21 .
22 .
23 . histogram status, frequency kdensity
   (bin=9, start=0, width=.11111111)

24 . histogram services, frequency kdensity
   (bin=9, start=0, width=.11111111)

25 . histogram population, frequency kdensity
   (bin=9, start=358670, width=1064845.9)

26 . histogram city_state, frequency kdensity
   (bin=9, start=0, width=.11111111)

27 . histogram foreign_pop, frequency kdensity
   (bin=9, start=.1, width=3.911111)

28 . histogram mayor_lr, frequency kdensity
   (bin=9, start=.2857143, width=.85714286)

29 . histogram gdp_pc, frequency kdensity
   (bin=9, start=24231, width=6801.5556)
```

```
30 .
31 .
32 . ***logarithmic function***
33 . gen log_population=ln(population)

34 . gen log_gdp_pc=ln(gdp_pc)
   (1 missing value generated)

35 .
36 . histogram log_population, frequency kdensity
   (bin=9, start=12.790158, width=.36912759)

37 . histogram log_gdp_pc, frequency kdensity
   (bin=9, start=10.095388, width=.14002662)

38 .
39 . ***Recode GDP_pc***
40 . gen gdp_pc1000=gdp_pc/1000
   (1 missing value generated)

41 .
42 .
43 .
44 .
45 . ****************************************************************
46 . *** 2. Regressions ***********************************************
47 . ****************************************************************
48 .
49 .
50 . ***Model 1, all policies***
51 . logit policy log_population foreign_pop mayor_lr, vce(cluster n_cntry)

   Iteration 0:   log pseudolikelihood = -55.106837
   Iteration 1:   log pseudolikelihood = -50.120487
   Iteration 2:   log pseudolikelihood = -49.987889
   Iteration 3:   log pseudolikelihood = -49.987445
   Iteration 4:   log pseudolikelihood = -49.987445

   Logistic regression                             Number of obs     =         93
                                                   Wald chi2(3)      =       8.34
                                                   Prob > chi2       =     0.0396
   Log pseudolikelihood = -49.987445               Pseudo R2         =     0.0929

                                 (Std. Err. adjusted for 19 clusters in n_cntry)
   ------------------------------------------------------------------------------
                |               Robust
         policy |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
   -------------+----------------------------------------------------------------
   log_population |   .2350548   .3271546     0.72   0.472    -.4061565     .876266
      foreign_pop |   .0790469    .042009     1.88   0.060    -.0032892     .161383
         mayor_lr |  -.1789268   .1486813    -1.20   0.229    -.4703367    .1124832
            _cons |  -4.394628   4.368404    -1.01   0.314    -12.95654    4.167286
   ------------------------------------------------------------------------------

52 . logit policy gdp_pc1000 foreign_pop mayor_lr, vce(cluster n_cntry)

   Iteration 0:   log pseudolikelihood = -54.776826
   Iteration 1:   log pseudolikelihood =  -47.27421
   Iteration 2:   log pseudolikelihood = -47.047212
   Iteration 3:   log pseudolikelihood = -47.046468
   Iteration 4:   log pseudolikelihood = -47.046468

   Logistic regression                             Number of obs     =         92
                                                   Wald chi2(3)      =      16.21
                                                   Prob > chi2       =     0.0010
   Log pseudolikelihood = -47.046468               Pseudo R2         =     0.1411
```

(Std. Err. adjusted for **19** clusters in n_cntry)

policy	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
gdp_pc1000	**.0570137**	**.0249638**	**2.28**	**0.022**	**.0080856**	**.1059417**
foreign_pop	**.0071119**	**.0504975**	**0.14**	**0.888**	**-.0918615**	**.1060852**
mayor_lr	**-.236683**	**.1580191**	**-1.50**	**0.134**	**-.5463948**	**.0730288**
_cons	**-2.67366**	**1.588524**	**-1.68**	**0.092**	**-5.787109**	**.4397887**

```
53 .
54 . vif, uncentered
```

Variable	VIF	1/VIF
gdp_pc1000	**14.19**	**0.070469**
foreign_pop	**7.37**	**0.135774**
mayor_lr	**4.72**	**0.211939**
Mean VIF	**8.76**	

```
55 .
56 .
57 . ***Model 2, service policies***
58 . *These are the models that I use
59 . logit services log_population foreign_pop mayor_lr, vce(cluster n_cntry)

Iteration 0:   log pseudolikelihood = -53.105112
Iteration 1:   log pseudolikelihood =  -47.52249
Iteration 2:   log pseudolikelihood = -47.323706
Iteration 3:   log pseudolikelihood =  -47.32296
Iteration 4:   log pseudolikelihood =  -47.32296

Logistic regression                             Number of obs     =         93
                                                Wald chi2(3)      =       7.96
                                                Prob > chi2       =     0.0469
Log pseudolikelihood =  -47.32296               Pseudo R2         =     0.1089

                                (Std. Err. adjusted for 19 clusters in n_cntry)
------------------------------------------------------------------------------
             |               Robust
    services |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
log_population |   .2717024   .3569441     0.76   0.447    -.4278951    .9712999
   foreign_pop |   .0900028   .0441864     2.04   0.042     .0033991    .1766065
      mayor_lr |  -.1787259   .1615528    -1.11   0.269    -.4953636    .1379118
         _cons |  -5.172255   4.944523    -1.05   0.296    -14.86334    4.518832
------------------------------------------------------------------------------

60 . logit services gdp_pc1000 foreign_pop mayor_lr, vce(cluster n_cntry)

Iteration 0:   log pseudolikelihood = -52.804733
Iteration 1:   log pseudolikelihood =  -42.98683
Iteration 2:   log pseudolikelihood = -42.544725
Iteration 3:   log pseudolikelihood = -42.543584
Iteration 4:   log pseudolikelihood = -42.543584

Logistic regression                             Number of obs     =         92
                                                Wald chi2(3)      =      29.52
                                                Prob > chi2       =     0.0000
Log pseudolikelihood = -42.543584               Pseudo R2         =     0.1943
```

(Std. Err. adjusted for **19** clusters in n_cntry)

services	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
gdp_pc1000	**.0773643**	**.0176777**	**4.38**	**0.000**	**.0427166**	**.112012**
foreign_pop	**-.0055527**	**.051222**	**-0.11**	**0.914**	**-.105946**	**.0948407**
mayor_lr	**-.2524312**	**.1905618**	**-1.32**	**0.185**	**-.6259255**	**.1210632**
_cons	**-3.570216**	**1.507849**	**-2.37**	**0.018**	**-6.525546**	**-.6148869**

```
61 .
62 . vif, uncentered
```

Variable	VIF	1/VIF
gdp_pc1000	**14.19**	**0.070469**
foreign_pop	**7.37**	**0.135774**
mayor_lr	**4.72**	**0.211939**
Mean VIF	**8.76**	

```
63 .
64 .
65 . *** Correlation Table ***
66 . corr policy status services population gdp_pc foreign_pop mayor_lr city_state
(obs=92)
```

	policy	status	services	popula~n	gdp_pc	foreig~p	mayor_lr	city_s~e
policy	**1.0000**							
status	**0.3820**	**1.0000**						
services	**0.9465**	**0.1851**	**1.0000**					
population	**0.0540**	**0.1752**	**0.0698**	**1.0000**				
gdp_pc	**0.3730**	**-0.0290**	**0.4438**	**0.2809**	**1.0000**			
foreign_pop	**0.2891**	**0.0071**	**0.3122**	**0.1420**	**0.6193**	**1.0000**		
mayor_lr	**-0.2325**	**-0.2174**	**-0.2350**	**-0.1937**	**-0.2043**	**-0.4076**	**1.0000**	
city_state	**0.3820**	**0.1540**	**0.4035**	**0.2211**	**0.0986**	**0.1483**	**-0.1596**	**1.0000**

```
67 .
68 . estpost corr policy status services population gdp_pc foreign_pop mayor_lr city_state, matrix listwise
```

	e(b)	e(rho)	e(p)	e(count)
policy				
policy	**1**	**1**		**92**
status	**.3819537**	**.3819537**	**.000172**	**92**
services	**.9465345**	**.9465345**	**5.33e-46**	**92**
population	**.0540395**	**.0540395**	**.6089199**	**92**
gdp_pc	**.3730309**	**.3730309**	**.0002501**	**92**
foreign_pop	**.2890993**	**.2890993**	**.0051904**	**92**
mayor_lr	**-.2325496**	**-.2325496**	**.0256999**	**92**
city_state	**.3819537**	**.3819537**	**.000172**	**92**
status				
status	**1**	**1**		**92**
services	**.1851484**	**.1851484**	**.0772433**	**92**
population	**.1751541**	**.1751541**	**.0949223**	**92**
gdp_pc	**-.0289967**	**-.0289967**	**.7837914**	**92**
foreign_pop	**.0071498**	**.0071498**	**.9460706**	**92**
mayor_lr	**-.2174034**	**-.2174034**	**.0373683**	**92**
city_state	**.154023**	**.154023**	**.1426755**	**92**
services				
services	**1**	**1**		**92**
population	**.0697606**	**.0697606**	**.5087551**	**92**
gdp_pc	**.4438078**	**.4438078**	**9.37e-06**	**92**
foreign_pop	**.3121816**	**.3121816**	**.0024496**	**92**
mayor_lr	**-.2350183**	**-.2350183**	**.0241283**	**92**
city_state	**.4035285**	**.4035285**	**.0000665**	**92**
population				
population	**1**	**1**		**92**
gdp_pc	**.2808897**	**.2808897**	**.0066839**	**92**

foreign_pop	.1420286	.1420286	.1768485	92
mayor_lr	-.1936809	-.1936809	.0643308	92
city_state	.2211479	.2211479	.0341345	92
gdp_pc				
gdp_pc	1	1		92
foreign_pop	.6193327	.6193327	4.67e-11	92
mayor_lr	-.2042549	-.2042549	.0508196	92
city_state	.0986257	.0986257	.3496164	92
foreign_pop				
foreign_pop	1	1		92
mayor_lr	-.4075683	-.4075683	.0000552	92
city_state	.1482519	.1482519	.1584372	92
mayor_lr				
mayor_lr	1	1		92
city_state	-.1596048	-.1596048	.1285853	92
city_state				
city_state	1	1		92

```
69 . eststo corr

70 . esttab corr using corr_tab.rtf, unstack not noobs compress
   file corr_tab.rtf already exists
   r(602);

   end of do-file

   r(602);

71 .
```