

Producing output tables from multiple regressions for Latex using Stata*

Miguel Portela[†]

September 26, 2010

In this document I discuss how to produce output tables from multiple regressions for Latex using Stata. I make use of Stata's commands *est2vec* and *est2tex*. For further details on their use please look in their help files. In the Stata example I attach, '*output.do*', you will find one possible way to use both commands. Additionally, I show in the '*do*' file how to add additional statistics to the output, specifically a joint significance test. The result is shown in Table 1.

We can further improve the design of the table by adding additional latex facilities. In particular, I add the possibility for tables to extend across more than one page (Latex package *longtable*). I now present the table which results from the combination of *table_regs.tex* (produced by *est2tex*) and a little Latex editing (it changes the header and footer of Stata Latex output). For this I use a second table, *t_regs.tex*, with the correct header and footer. Once we run the Stata '*do*' file we open the file *table_regs.tex* it produces and copy lines 6 to 25. We now paste the contents of the clipboard in *t_regs.tex* after '*endlastfoot*', line 14. We can, additionally, edit the labels of the variables and statistics. We now obtain Table 2.

Table 2: OLS results, random numbers

Model	M1	M2	M3	M4	M5	M6
Uniform	6.656*** (1.069)	6.194*** (.557)	6.980*** (.032)	6.982*** (.032)	6.982*** (.032)	6.981*** (.032)
Sqrt, Uniform		11.180*** (.216)	10.984*** (.012)	10.985*** (.012)	10.985*** (.012)	10.985*** (.012)
Chi-2			.999*** (.002)	.999*** (.002)	.999*** (.002)	.999*** (.002)
Gamma				.0003 (.0004)	.0003 (.0004)	.0003 (.0004)
Poisson					.0003 (.002)	.0004 (.002)
t-student						-.004 (.008)

Continued on next page...

*I am grateful to Fazeer S. Rahim and participants at the 2010 Portuguese Stata Users Group Meeting for comments and suggestions.

[†]University of Minho, NIPE and IZA. Email: mangelo@eeg.uminho.pt.

... table 2 continued

Model	M1	M2	M3	M4	M5	M6
r1	38.788	1410.944	391698.400	293717.200	234743.300	195472.700
r2	1.000	2.000	3.000	4.000	5.000	6.000
r3	6.95e-10	.000	.000	.000	.000	.000
Obs.	1000	1000	1000	1000	1000	1000
R^2	.037	.739	.999	.999	.999	.999
e(r2-a)	.036	.738	.999	.999	.999	.999
e(ll)	-3689.605	-3037.188	-171.69	-171.284	-171.272	-171.144
e(rmse)	9.696	5.052	.288	.288	.288	.288

Notes: Significance levels: * : 10% ** : 5% *** : 1%. RMSE is root mean squared error.

Finally, following a suggestion by Fazeer S. Rahim, I inserted the header and footer directly in the Tex document. This is a more efficient solution to produce the output table as it updates Latex faster once we run Stata code. We now simply need to edit the file produced by est2tex (in Stata I have copied (*sh copy ...*) the output also to *table_regs2.tex*) and delete the header and footer (in the original file *table_regs2.tex* produced by Stata, delete lines 1-4 (until the first *'hline'*), and then the last two lines). The result is shown in Table 3.

Table 3: OLS results, random numbers

Model	M1	M2	M3	M4	M5	M6
Uniform	7.882*** (.1058)	7.809*** (.546)	6.960*** (.032)	6.960*** (.032)	6.960*** (.032)	6.961*** (.032)
Sqrt, Uniform		11.041*** (.211)	11.019*** (.012)	11.019*** (.012)	11.019*** (.012)	11.019*** (.012)
Chi-2			.998*** (.002)	.998*** (.002)	.998*** (.002)	.998*** (.002)
Gamma				-1.00e-05 (.0003)	-1.00e-05 (.0003)	-1.00e-05 (.0003)
Poisson					.0007 (.002)	.0009 (.002)
t-student						-.007 (.008)
r1	55.509	1477.063	392246.300	293889.900	234901.200	195694.600
r2	1.000	2.000	3.000	4.000	5.000	6.000
r3	2.01e-13	.000	.000	.000	.000	.000
Obs.	1000	1000	1000	1000	1000	1000
R^2	.053	.748	.999	.999	.999	.999
e(r2-a)	.052	.747	.999	.999	.999	.999
e(ll)	-3687.587	-3026.149	-176.973	-176.972	-176.918	-176.559
e(rmse)	9.676	4.996	.289	.29	.29	.29

Notes: Significance levels: * : 10% ** : 5% *** : 1%. RMSE is root mean squared error.

Table 1: OLS results, random numbers; basic table

	R1	R2	R3	R4	R5	R6
	(1)	(2)	(3)	(4)	(5)	(6)
Uniform	7.882*** (1.058)	7.809*** (.546)	6.960*** (.032)	6.960*** (.032)	6.960*** (.032)	6.961*** (.032)
Sqrt, Uniform		11.041*** (.211)	11.019*** (.012)	11.019*** (.012)	11.019*** (.012)	11.019*** (.012)
Chi-2			.998*** (.002)	.998*** (.002)	.998*** (.002)	.998*** (.002)
Gamma				-1.00e-05 (.0003)	-1.00e-05 (.0003)	-1.00e-05 (.0003)
Poisson					.0007 (.002)	.0009 (.002)
t-student						-.007 (.008)
r1	55.509	1477.063	392246.300	293889.900	234901.200	195694.600
r2	1.000	2.000	3.000	4.000	5.000	6.000
r3	2.01e-13	.000	.000	.000	.000	.000
Obs.	1000	1000	1000	1000	1000	1000
R^2	.053	.748	.999	.999	.999	.999
e(r2-a)	.052	.747	.999	.999	.999	.999
e(ll)	-3687.587	-3026.149	-176.973	-176.972	-176.918	-176.559
e(rmse)	9.676	4.996	.289	.29	.29	.29

Feel free to discuss with me alternative solutions, as well as change the 'do' file.