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1 *****Name: Imisi Raphael Aiyetan*****
2 *****Course: Econometrics 512*****
3
4 clear all
5
6
7 set more off
8 **** We define the number of observation for the uniform
distribution*****
9 set obs 1000
10
11 gen a = _n
12
13 *** We define the distribution in the next line of code*****
14
15 gen t = runiform()
16
17 **** Generate Y varibale assuming mean = 0 and variance = 1*****
18
19 gen y = 10 + rnormal()
20
21 **** Generate t1 varibale assuming mean = 0 and variance = 1*****
22
23 gen t1 = t + rnormal()
24
25 **** Generate t2 varibale assuming mean = 0 and variance = 1*****
26
27 gen t2 = t + rnormal()
28
29 ***** Q1= We run Y on t *****
30
31 reg y t
32
33 ***** We define the next line of code how to derive beta1*****
34
35 mat beta1 = e(b)
36
37 svmat beta1, names(matcol)
38
39 scalar beta_endog1 = beta1t * (1/(1+1))
40
41 ***** Q2 = We run Y on t1 *****
42
43 reg y t1
44
45 ***** We define the next line of code on how to derive beta1*****
46
47 mat beta2 = e(b)

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48
49   svmat beta2, names(matcol)
50
51   scalar beta_endog2 = beta2t1
52
53   ****Q3 = We run Y on t2 replacing t1 as an IV to estimate beta
   close beta1****
54
55   reg y t2
56
57   scalar list
58
59
```