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1  /*Assignment 5*/
2  cd "/Users/bmishra/Dropbox/OSU/PhD/Fall 2021/AGEC5233
   PDA/Assignment/Assignment5"
3  use LesothoProfitCA.dta, clear
4
5  *ssc install psmatch, replace
6  *ssc install pstest, replace
7
8  label var fieldsize "Field Size (ha)"
9  label var ca "Adopt conservation ag."
10 label var inclivstcksale "Inc. livestock (percent)"
11 label var incremittance "Inc. remittances (percent)"
12 label var agehh "Age household head (years)"
13 label var agtraining "Received ag. training"
14 label var highschoolhh "High school degree"
15 label var creditloan "Received credit loan"
16 label var profit "Field profit ($/ha)"
17 ds
18
19
20 * Q2:
21 /* Use STATA's psmatch2 procedure to estimate ATT using
   the following matching procedures: */
22
23 /* Mahalanobis with five (5) nearest neighbors */
24 psmatch2 ca agtraining inclivstcksale fieldsize
   highschoolhh agehh, outcome(profit) neighbor(5)
   mahalanobis(agtraining inclivstcksale fieldsize
   highschoolhh agehh)
25
26 /* psmatch2 ptest rubin */

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26  /* psmatch2 ptest rubin */
27  ptest agtraining inclivstcksale fieldsize highschoolhh
    agehh, both rubin treated(ca)
28
29  /* psmatch2 Bootstrap */
30  bootstrap r(att), reps(500) mse nodots: psmatch2 ca
    agtraining inclivstcksale fieldsize highschoolhh agehh,
    outcome(profit) neighbor(5) mahalanobis(agtraining
    inclivstcksale fieldsize highschoolhh agehh)
31
32
33  /* Kernel matching estimator, with a Epanechnikov kernel */
34  psmatch2 ca agtraining inclivstcksale fieldsize
    highschoolhh agehh, out (profit) kernel kerneltype(epan)
    ties warn com logit
35
36  /* Kernel matching estimator, with a Epanechnikov kernel
    rubin not */
37  ptest agtraining inclivstcksale fieldsize highschoolhh
    agehh, both rubin
38
39  /* Kernel matching estimator, with a Epanechnikov kernel
    Bootstrap */
40  bootstrap r(att), reps(500) mse nodots: psmatch2 ca
    agtraining inclivstcksale fieldsize highschoolhh agehh,
    out (profit) kernel kerneltype(epan) ties warn com logit
41
42
43  /* Kernel matching estimator, with a Normal Kernel */
44  psmatch2 ca agtraining inclivstcksale fieldsize
    highschoolhh agehh, out (profit) kernel kerneltype(normal)
    ties warn com logit

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