



```

1 .
2 . clear

3 . set more off

4 . cd "C:\Users\wonja\Documents\GitHub\14.320\PS3"
   C:\Users\wonja\Documents\GitHub\14.320\PS3

5 . use NHIS2009_clean

6 .
7 . * Problem 3.(a)
8 .
9 . * select non-missings
10 .      keep if marradult==1 & perweight!=0
    (50,662 observations deleted)

11 .      by serial: egen hi_hsb = mean(hi_hsb1)
    (207 missing values generated)

12 .      keep if hi_hsb!=. & hi!=.
    (207 observations deleted)

13 .      by serial: egen female = total(fml)

14 .      keep if female==1
    (31 observations deleted)

15 .      drop female

16 .
17 . * Josh's sample selection criteria
18 .      gen angrist = ( age>=26 & age<=59 & marradult==1 & adltempl>=1 )

19 .      keep if angrist==1
    (9,613 observations deleted)

20 .      // drop single-person HHS
21 .      by serial: gen n = _N

22 .      keep if n>1
    (1,331 observations deleted)

23 .
24 . eststo: reg health uninsured if sex == 1

```

| Source   | SS                | df           | MS                | Number of obs | = | 9,395         |
|----------|-------------------|--------------|-------------------|---------------|---|---------------|
| Model    | <b>98.7315707</b> | <b>1</b>     | <b>98.7315707</b> | F(1, 9393)    | = | <b>110.10</b> |
| Residual | <b>8423.39786</b> | <b>9,393</b> | <b>.896773966</b> | Prob > F      | = | <b>0.0000</b> |
|          |                   |              |                   | R-squared     | = | <b>0.0116</b> |
|          |                   |              |                   | Adj R-squared | = | <b>0.0115</b> |
| Total    | <b>8522.12943</b> | <b>9,394</b> | <b>.90718857</b>  | Root MSE      | = | <b>.94698</b> |

| health    | Coef.            | Std. Err.       | t             | P> t         | [95% Conf. Interval] |                  |
|-----------|------------------|-----------------|---------------|--------------|----------------------|------------------|
| uninsured | <b>-.2777127</b> | <b>.0264673</b> | <b>-10.49</b> | <b>0.000</b> | <b>-.3295943</b>     | <b>-.2258311</b> |
| _cons     | <b>2.578563</b>  | <b>.0495989</b> | <b>51.99</b>  | <b>0.000</b> | <b>2.481338</b>      | <b>2.675787</b>  |

(est1 stored)

```

25 . esttab using PS3-3a.tex, replace compress cells("b(label(coef) fmt(a3) star)
> ci(par fmt(a3))" t(par fmt(a3))) label varlabels(uninsured "Covered by insura
> nce" _cons "Constant") nonumber stats(N, fmt(%9.0gc) label(Observations)) add
> note("t statistics in parentheses" "@starlegend")
(output written to PS3-3a.tex)

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26 . eststo clear

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27 .

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28 . * Problem 3.(b)

```

```

29 .

```

```

30 . eststo: reg health uninsured age if sex == 1

```

| Source   | SS         | df    | MS         | Number of obs | = | 9,395  |
|----------|------------|-------|------------|---------------|---|--------|
| Model    | 347.434273 | 2     | 173.717137 | F(2, 9392)    | = | 199.59 |
| Residual | 8174.69516 | 9,392 | .870389178 | Prob > F      | = | 0.0000 |
|          |            |       |            | R-squared     | = | 0.0408 |
|          |            |       |            | Adj R-squared | = | 0.0406 |
| Total    | 8522.12943 | 9,394 | .90718857  | Root MSE      | = | .93295 |

  

| health    | Coef.     | Std. Err. | t      | P> t  | [95% Conf. Interval] |          |
|-----------|-----------|-----------|--------|-------|----------------------|----------|
| uninsured | -.3326014 | .0262764  | -12.66 | 0.000 | -.3841089            | -.281094 |
| age       | .0189746  | .0011225  | 16.90  | 0.000 | .0167743             | .021175  |
| _cons     | 1.850366  | .0651419  | 28.41  | 0.000 | 1.722674             | 1.978058 |

(est1 stored)

```

31 . eststo: reg health uninsured age yedu if sex == 1

```

| Source   | SS         | df    | MS         | Number of obs | = | 9,395  |
|----------|------------|-------|------------|---------------|---|--------|
| Model    | 716.032755 | 3     | 238.677585 | F(3, 9391)    | = | 287.14 |
| Residual | 7806.09668 | 9,391 | .831231677 | Prob > F      | = | 0.0000 |
|          |            |       |            | R-squared     | = | 0.0840 |
|          |            |       |            | Adj R-squared | = | 0.0837 |
| Total    | 8522.12943 | 9,394 | .90718857  | Root MSE      | = | .91172 |

  

| health    | Coef.     | Std. Err. | t      | P> t  | [95% Conf. Interval] |           |
|-----------|-----------|-----------|--------|-------|----------------------|-----------|
| uninsured | -.1265868 | .0274791  | -4.61  | 0.000 | -.1804517            | -.0727219 |
| age       | .0185387  | .0010972  | 16.90  | 0.000 | .016388              | .0206894  |
| yedu      | -.0701384 | .0033307  | -21.06 | 0.000 | -.0766674            | -.0636095 |
| _cons     | 2.448775  | .0697144  | 35.13  | 0.000 | 2.31212              | 2.58543   |

(est2 stored)

```

32 . eststo: reg health uninsured age yedu inc if sex == 1

```

| Source   | SS         | df    | MS         | Number of obs | = | 9,395  |
|----------|------------|-------|------------|---------------|---|--------|
| Model    | 925.505667 | 4     | 231.376417 | F(4, 9390)    | = | 286.00 |
| Residual | 7596.62376 | 9,390 | .809012115 | Prob > F      | = | 0.0000 |
|          |            |       |            | R-squared     | = | 0.1086 |
|          |            |       |            | Adj R-squared | = | 0.1082 |
| Total    | 8522.12943 | 9,394 | .90718857  | Root MSE      | = | .89945 |

  

| health    | Coef.     | Std. Err. | t      | P> t  | [95% Conf. Interval] |           |
|-----------|-----------|-----------|--------|-------|----------------------|-----------|
| uninsured | -.00728   | .028105   | -0.26  | 0.796 | -.0623718            | .0478118  |
| age       | .0204035  | .0010886  | 18.74  | 0.000 | .0182696             | .0225373  |
| yedu      | -.0487491 | .0035446  | -13.75 | 0.000 | -.0556973            | -.0418009 |
| inc       | -3.10e-06 | 1.93e-07  | -16.09 | 0.000 | -3.48e-06            | -2.72e-06 |
| _cons     | 2.147955  | .0712719  | 30.14  | 0.000 | 2.008247             | 2.287664  |

(est3 stored)

```
33 . esttab using PS3-3b.tex, replace compress cells(b(label(coef) fmt(a3) star) t
> (par fmt(a3))) label varlabels(uninsured "Covered by insurance" yedu "Years o
> f education" inc "Income" _cons "Constant") nonumber stats(N, fmt(%9.0gc) lab
> el(Observations)) addnote("t statistics in parentheses" "@starlegend")
(output written to PS3-3b.tex)

34 . eststo clear

35 .
36 . log close
    name: <unnamed>
    log: C:\Users\wonja\Documents\GitHub\14.320\PS3\PS3-3.smcl
    log type: smcl
    closed on: 28 Mar 2021, 18:49:02
```

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