

```
1 * make sure there's enough RAM
2 set mem 500m
3
4 * load the downloaded data set
5 use "C:\Users\AnthonyD\Desktop\MWIR4DDT\MWIR4DFL.DTA" , clear
6
7 * scale the weights as recommended
8 generate weight = v005/1000000
9
10 * construct the strata variable as described in this forum
11 egen strata = group(v022 v025), label
12
13 * construct a "40-49 year olds" binary variable
14 generate ffn = ( v447a >= 40 & v447a < 50 )
15
16 * construct a "never married" binary variable
17 generate nm = v501 == 0
18
19
20
21 *****
22
23
24 * for "Children ever born" the publication says:
25 * standard error 0.032
26 * DEFT 1.279
27
28
29
30 * deal with singleton psus by scaling..
31 svyset [pweight=weight], psu(v021) strata(strata) singleunit( scaled )
32
33 svy: mean v201
34 * this standard error is 0.034975
35
36 estat effects
37 * this DEFT says 1.39108
38
39 * try with jackknife replication instead..
40 svy jackknife: mean v201
41 * this standard error is 0.0349968
42
43 estat effects
44 * this DEFT says 1.39195
45
46 * try with certainty PSUs..
47 svyset [pweight=weight], psu(v021) strata(strata) singleunit( certainty )
48
49 svy: mean v201
50 * this standard error CORRECTLY rounds down to 0.032 -- it's 0.0324946
51 estat effects
52 * but the DEFT is 1.29243, which is still not correct
53
54 svy jackknife: mean v201
55 * this standard error rounds up to 0.033 -- it's 0.0325148
56 estat effects
57 * and the DEFT is also wrong: 1.29323
58
59
60 * try with centered PSUs..
61 svyset [pweight=weight], psu(v021) strata(strata) singleunit( centered )
62
63 * this standard error rounds up to 0.033 -- it's 0.0325691
64 estat effects
65 * and the DEFT is also wrong: 1.29539
66
67 svy jackknife: mean v201
68 * this standard error rounds up to 0.033 -- it's 0.0325148
69 estat effects
```

```
70 * the DEFT is also wrong: 1.29323
71
72 *****
73
74
75 * certainty PSUs got me the closest, so i'll go with that for the next round
76 svyset [pweight=weight], psu(v021) strata(strata) singleunit( certainty )
77
78
79 * the publication says
80 * 0.168 of women were never married
81 * with a standard error of 0.006
82 * and a DEFT of 1.612
83 svy: mean nm
84 * gives the correct mean and standard error (0.0055304)
85 estat effects
86 * but the DEFT is still off: 1.59838
87
88
89
90 * the publication says
91 * there are an unweighted 1,710 records of women aged 40-49
92 * confirm that the `ffn` has been built correctly:
93 tab ffn
94
95 * the publication says
96 * there are a weighted 1,684 records of women aged 40-49
97 svy: total ffn
98 * gives 1,684.034 so i assume that's built correctly.
99
100 * the publication says: among women aged 40-49
101 * 6.550 children born
102 * standard error: 0.080
103 * DEFT of 1.188
104
105
106 svy, subpop( ffn ): mean v201
107 * this command gives mean: 6.549798 and SE: 0.0799961,
108 * which round to the two published numbers above
109 estat effects
110 * but the DEFT is 1.18558, which is off by 0.002?
111
112
113 * the publication says
114 * "The Jackknife repeated replication method is used for variance estimation of more
115 * complex statistics such as fertility and mortality rates."
116 * so for the fertility rate, i believe it should be "svy jackknife"?
117 svy jackknife, subpop( ffn ): mean v201
118 * this command gives mean: 6.549798 and SE: 0.0798322,
119 * so the standard error no longer rounds correctly?
120 estat effects
121 * and here the DEFT is even further away: 1.18315
122
123
124
```