
name: <unnamed>
log: d:\temp\hps.log
log type: text
opened on: 5 Oct 2020, 10:26:16

```
.
. *****
. * Merge the individual data with weights dta at Week 11
. *****
.
. use "D:\jason\workshop\Household Pulse Survey\Phase 1\week 11-(7.9-7.14)\pulse2020_puf_11.dta", clear
.
. sort scram
.
. save, replace
file D:\jason\workshop\Household Pulse Survey\Phase 1\week 11-(7.9-7.14)\pulse2020_puf_11.dta saved
.
.
. use "D:\jason\workshop\Household Pulse Survey\Phase 1\week 11-(7.9-7.14)\pulse2020_repwgt_puf_11.dta", clear
.
. sort scram
.
. save, replace
file D:\jason\workshop\Household Pulse Survey\Phase 1\week 11-(7.9-7.14)\pulse2020_repwgt_puf_11.dta saved
.
. use "D:\jason\workshop\Household Pulse Survey\Phase 1\week 11-(7.9-7.14)\pulse2020_puf_11.dta", clear
.
. merge 1:1 scram using "D:\jason\workshop\Household Pulse Survey\Phase 1\week 11-(7.9-7.14)\pulse2020_repwgt_puf_11.dta"

Result                # of obs.
-----
not matched                0
matched                    91,605  (_merge==3)
-----

. drop _merge
.
. sort scram
.
. save "D:\jason\workshop\Household Pulse Survey\week11.dta", replace
file D:\jason\workshop\Household Pulse Survey\week11.dta saved
.
. *****
. * Merge the individual data with weights dta at Week 12
. *****
.
. use "D:\jason\workshop\Household Pulse Survey\Phase 1\week 12-(7.16-7.21)\pulse2020_puf_12.dta", clear
.
. sort scram
.
. save, replace
file D:\jason\workshop\Household Pulse Survey\Phase 1\week 12-(7.16-7.21)\pulse2020_puf_12.dta saved
.
.
. use "D:\jason\workshop\Household Pulse Survey\Phase 1\week 12-(7.16-7.21)\pulse2020_repwgt_puf_12.dta", clear
.
. sort scram
.
. save, replace
file D:\jason\workshop\Household Pulse Survey\Phase 1\week 12-(7.16-7.21)\pulse2020_repwgt_puf_12.dta saved
.
. use "D:\jason\workshop\Household Pulse Survey\Phase 1\week 12-(7.16-7.21)\pulse2020_puf_12.dta", clear
.
. merge 1:1 scram using "D:\jason\workshop\Household Pulse Survey\Phase 1\week 12-(7.16-7.21)\pulse2020_repwgt_puf_12.dta"

Result                # of obs.
-----
not matched                0
matched                    86,792  (_merge==3)
-----

. drop _merge
.
. sort scram
.
. save "D:\jason\workshop\Household Pulse Survey\week12.dta", replace
```

file D:\jason\workshop\Household Pulse Survey\week12.dta saved

```
.
.
. *****
. * Analyzing single-week HPS data
. *****
.
.
. use "D:\jason\workshop\Household Pulse Survey\week11.dta", clear
.
.
.
. *****
. *clean up the data
. *****
.
.
. tab1 TBIRTH_YEAR, mis
```

-> tabulation of TBIRTH_YEAR

TBIRTH_YEAR	Freq.	Percent	Cum.
1932	311	0.34	0.34
1933	103	0.11	0.45
1934	129	0.14	0.59
1935	163	0.18	0.77
1936	212	0.23	1.00
1937	256	0.28	1.28
1938	349	0.38	1.66
1939	369	0.40	2.07
1940	437	0.48	2.54
1941	524	0.57	3.11
1942	713	0.78	3.89
1943	798	0.87	4.76
1944	836	0.91	5.68
1945	929	1.01	6.69
1946	1,193	1.30	7.99
1947	1,451	1.58	9.58
1948	1,432	1.56	11.14
1949	1,404	1.53	12.67
1950	1,518	1.66	14.33
1951	1,713	1.87	16.20
1952	1,793	1.96	18.16
1953	1,779	1.94	20.10
1954	1,851	2.02	22.12
1955	1,955	2.13	24.25
1956	1,914	2.09	26.34
1957	1,989	2.17	28.51
1958	1,813	1.98	30.49
1959	1,867	2.04	32.53
1960	1,959	2.14	34.67
1961	1,834	2.00	36.67
1962	1,833	2.00	38.67
1963	1,752	1.91	40.59
1964	1,803	1.97	42.55
1965	1,746	1.91	44.46
1966	1,711	1.87	46.33
1967	1,673	1.83	48.15
1968	1,641	1.79	49.95
1969	1,766	1.93	51.87
1970	1,888	2.06	53.93
1971	1,758	1.92	55.85
1972	1,664	1.82	57.67
1973	1,698	1.85	59.52
1974	1,623	1.77	61.30
1975	1,747	1.91	63.20
1976	1,693	1.85	65.05
1977	1,834	2.00	67.05
1978	1,774	1.94	68.99
1979	1,892	2.07	71.06
1980	1,892	2.07	73.12
1981	1,864	2.03	75.16
1982	1,918	2.09	77.25
1983	1,867	2.04	79.29
1984	1,846	2.02	81.30
1985	1,722	1.88	83.18
1986	1,632	1.78	84.96
1987	1,522	1.66	86.63
1988	1,505	1.64	88.27
1989	1,366	1.49	89.76
1990	1,332	1.45	91.21
1991	1,198	1.31	92.52

1992	1,044	1.14	93.66
1993	994	1.09	94.75
1994	850	0.93	95.67
1995	802	0.88	96.55
1996	648	0.71	97.26
1997	600	0.65	97.91
1998	476	0.52	98.43
1999	431	0.47	98.90
2000	411	0.45	99.35
2001	338	0.37	99.72
2002	257	0.28	100.00

 Total | 91,605 100.00

. gen agegroup = TBIRTH_YEAR

. recode agegroup (1930/1940.1 = 7) (1940.2/1950.1 = 6) (1950.2/1960.1 = 5) (1960.2/1970.1 = 4) (1970.2/1980.1 = 3) (1980.2/1990.1 = 2) (1990.2/2000.1 = 1)
 (agegroup: 91605 changes made)

. tab2 TBIRTH_YEAR agegroup, mis

-> tabulation of TBIRTH_YEAR by agegroup

TBIRTH_YEA R	agegroup							Total
	1	2	3	4	5	6	7	
1932	0	0	0	0	0	0	311	311
1933	0	0	0	0	0	0	103	103
1934	0	0	0	0	0	0	129	129
1935	0	0	0	0	0	0	163	163
1936	0	0	0	0	0	0	212	212
1937	0	0	0	0	0	0	256	256
1938	0	0	0	0	0	0	349	349
1939	0	0	0	0	0	0	369	369
1940	0	0	0	0	0	0	437	437
1941	0	0	0	0	0	524	0	524
1942	0	0	0	0	0	713	0	713
1943	0	0	0	0	0	798	0	798
1944	0	0	0	0	0	836	0	836
1945	0	0	0	0	0	929	0	929
1946	0	0	0	0	0	1,193	0	1,193
1947	0	0	0	0	0	1,451	0	1,451
1948	0	0	0	0	0	1,432	0	1,432
1949	0	0	0	0	0	1,404	0	1,404
1950	0	0	0	0	0	1,518	0	1,518
1951	0	0	0	0	1,713	0	0	1,713
1952	0	0	0	0	1,793	0	0	1,793
1953	0	0	0	0	1,779	0	0	1,779
1954	0	0	0	0	1,851	0	0	1,851
1955	0	0	0	0	1,955	0	0	1,955
1956	0	0	0	0	1,914	0	0	1,914
1957	0	0	0	0	1,989	0	0	1,989
1958	0	0	0	0	1,813	0	0	1,813
1959	0	0	0	0	1,867	0	0	1,867
1960	0	0	0	0	1,959	0	0	1,959
1961	0	0	0	1,834	0	0	0	1,834
1962	0	0	0	1,833	0	0	0	1,833
1963	0	0	0	1,752	0	0	0	1,752
1964	0	0	0	1,803	0	0	0	1,803
1965	0	0	0	1,746	0	0	0	1,746
1966	0	0	0	1,711	0	0	0	1,711
1967	0	0	0	1,673	0	0	0	1,673
1968	0	0	0	1,641	0	0	0	1,641
1969	0	0	0	1,766	0	0	0	1,766
1970	0	0	0	1,888	0	0	0	1,888
1971	0	0	1,758	0	0	0	0	1,758
1972	0	0	1,664	0	0	0	0	1,664
1973	0	0	1,698	0	0	0	0	1,698
1974	0	0	1,623	0	0	0	0	1,623
1975	0	0	1,747	0	0	0	0	1,747
1976	0	0	1,693	0	0	0	0	1,693
1977	0	0	1,834	0	0	0	0	1,834
1978	0	0	1,774	0	0	0	0	1,774
1979	0	0	1,892	0	0	0	0	1,892
1980	0	0	1,892	0	0	0	0	1,892
1981	0	1,864	0	0	0	0	0	1,864
1982	0	1,918	0	0	0	0	0	1,918
1983	0	1,867	0	0	0	0	0	1,867
1984	0	1,846	0	0	0	0	0	1,846
1985	0	1,722	0	0	0	0	0	1,722
1986	0	1,632	0	0	0	0	0	1,632
1987	0	1,522	0	0	0	0	0	1,522
1988	0	1,505	0	0	0	0	0	1,505

1989	0	1,366	0	0	0	0	0	1,366
1990	0	1,332	0	0	0	0	0	1,332
1991	1,198	0	0	0	0	0	0	1,198
1992	1,044	0	0	0	0	0	0	1,044
1993	994	0	0	0	0	0	0	994
1994	850	0	0	0	0	0	0	850
1995	802	0	0	0	0	0	0	802
1996	648	0	0	0	0	0	0	648
1997	600	0	0	0	0	0	0	600
1998	476	0	0	0	0	0	0	476
1999	431	0	0	0	0	0	0	431
2000	411	0	0	0	0	0	0	411
2001	338	0	0	0	0	0	0	338
2002	257	0	0	0	0	0	0	257
Total	8,049	16,574	17,575	17,647	18,633	10,798	2,329	91,605

```
.
.
. tab1 income, mis
-> tabulation of income
```

income	Freq.	Percent	Cum.
-99	1,924	2.10	2.10
1	8,945	9.76	11.87
2	7,466	8.15	20.02
3	9,080	9.91	29.93
4	14,236	15.54	45.47
5	11,763	12.84	58.31
6	14,140	15.44	73.74
7	6,467	7.06	80.80
8	7,632	8.33	89.14
.m	9,952	10.86	100.00
Total	91,605	100.00	

```
. gen newincome = 1
. replace newincome = 0 if inrange(income,1,4)
(39,727 real changes made)
. replace newincome =. if inlist(income,-99, .m)
(11,876 real changes made, 11,876 to missing)
```

```
. tab2 income newincome, mis
-> tabulation of income by newincome
```

income	newincome		.	Total
	0	1		
-99	0	0	1,924	1,924
1	8,945	0	0	8,945
2	7,466	0	0	7,466
3	9,080	0	0	9,080
4	14,236	0	0	14,236
5	0	11,763	0	11,763
6	0	14,140	0	14,140
7	0	6,467	0	6,467
8	0	7,632	0	7,632
.m	0	0	9,952	9,952
Total	39,727	40,002	11,876	91,605

```
.
.
.
. *****
. * The use of SVY and Subpop commands to get the correct estimated parameters
. *****
```

```
. gen valid1 = 1
. replace valid1 =0 if newincome ==. | agegroup ==.
(11,876 real changes made)
. tab1 valid1, mis
-> tabulation of valid1
```

valid1	Freq.	Percent	Cum.
0	11,876	12.96	12.96
1	79,729	87.04	100.00
Total	91,605	100.00	

```
. svyset [iw=pweight], jkrweight(PWEIGHT1- PWEIGHT80, multiplier(.05)) ///
> vce(jackknife) mse
```

```

iweight: pweight
VCE: jackknife
MSE: on
jkrweight: PWEIGHT1 PWEIGHT2 PWEIGHT3 PWEIGHT4 PWEIGHT5 PWEIGHT6 PWEIGHT7 PWEIGHT8 PWEIGHT9 PWEIGHT10 PWEIGHT11 PWEI
PWEIGHT18 PWEIGHT19 PWEIGHT20 PWEIGHT21 PWEIGHT22 PWEIGHT23 PWEIGHT24 PWEIGHT25 PWEIGHT26 PWEIGHT27 PWEIG
PWEIGHT34 PWEIGHT35 PWEIGHT36 PWEIGHT37 PWEIGHT38 PWEIGHT39 PWEIGHT40 PWEIGHT41 PWEIGHT42 PWEIGHT43 PWEIG
PWEIGHT50 PWEIGHT51 PWEIGHT52 PWEIGHT53 PWEIGHT54 PWEIGHT55 PWEIGHT56 PWEIGHT57 PWEIGHT58 PWEIGHT59 PWEIG
PWEIGHT66 PWEIGHT67 PWEIGHT68 PWEIGHT69 PWEIGHT70 PWEIGHT71 PWEIGHT72 PWEIGHT73 PWEIGHT74 PWEIGHT75 PWEIG

Single unit: missing
Strata 1: <one>
SU 1: <observations>
FPC 1: <zero>

```

```
. svy, subpop(valid1): tab newincome agegroup
(running tabulate on estimation sample)
```

Number of strata	=	1	Number of obs	=	91,605
			Population size	=	249,170,916
			Subpop. no. obs	=	79,729
			Subpop. size	=	215,539,341
			Replications	=	79
			Design df	=	78

newincome	agegroup							Total
	1	2	3	4	5	6	7	
0	.1231	.1087	.0892	.092	.1053	.0616	.018	.5979
1	.0459	.0771	.0814	.0809	.0749	.0349	.007	.4021
Total	.1689	.1858	.1706	.173	.1802	.0965	.025	1

Key: cell proportion

```
Pearson:
Uncorrected chi2(6) = 1979.6355
Design-based F(5.22, 406.80) = 52.0108 P = 0.0000
```

```
. svy, subpop(valid1): logit newincome agegroup
(running logit on estimation sample)
```

```
Jackknife replications (80)
-----+----- 1 -----+----- 2 -----+----- 3 -----+----- 4 -----+----- 5
s..... 50
.....
```

Survey: Logistic regression

Number of strata	=	1	Number of obs	=	91,605
			Population size	=	249,170,916
			Subpop. no. obs	=	79,729
			Subpop. size	=	215,539,341
			Replications	=	79
			Design df	=	78
			F(1, 78)	=	31.52
			Prob > F	=	0.0000

newincome	Coef.	Jknife * Std. Err.	t	P> t	[95% Conf. Interval]	
agegroup	.0494641	.0088098	5.61	0.000	.0319251	.0670031
_cons	-.5655508	.0364034	-15.54	0.000	-.6380245	-.4930772

 * If the subpop option is not used, the estimated standard errors of the parameters are not correct

```

    2 |      18,816      11.79      100.00
-----
Total |      159,581      100.00
    
```

. list scram week n N ms wrkloss in 1/6000 if N ==2, sepby(scram)

	scram	week	n	N	ms	wrkloss
5765.	V100000001S51011543510123	11	1	2	1	2
5766.	V100000001S51011543510123	12	2	2	1	2
5768.	V100000002S02020857100123	11	1	2	3	2
5769.	V100000002S02020857100123	12	2	2	3	2
5770.	V100000005S73051116510123	11	1	2	1	2
5771.	V100000005S73051116510123	12	2	2	1	2
5779.	V100010002S59120737800123	11	1	2	5	2
5780.	V100010002S59120737800123	12	2	2	5	2
5781.	V100010002S71121832310113	11	1	2	5	1
5782.	V100010002S71121832310113	12	2	2	5	1
5783.	V100010003S15130502100113	11	1	2	5	1
5784.	V100010003S15130502100113	12	2	2	5	1
5785.	V100010003S15130857100123	11	1	2	3	1
5786.	V100010003S15130857100123	12	2	2	3	1
5787.	V100010005S90150742610113	11	1	2	1	1
5788.	V100010005S90150742610113	12	2	2	1	1
5793.	V100010009S30191973600113	11	1	2	5	2
5794.	V100010009S30191973600113	12	2	2	5	2
5795.	V100010009S36191944310113	11	1	2	1	1
5796.	V100010009S36191944310113	12	2	2	1	1
5804.	V100010829M78260970000123	11	1	2	1	1
5805.	V100010829M78260970000123	12	2	2	1	1
5809.	V100020000S19200120400113	11	1	2	5	2
5810.	V100020000S19200120400113	12	2	2	5	2
5813.	V100020001S11211190900123	11	1	2	1	2
5814.	V100020001S11211190900123	12	2	2	1	2
5816.	V100020001S78211353510123	11	1	2	1	1
5817.	V100020001S78211353510123	12	2	2	1	1
5818.	V100020001S91210092100113	11	1	2	3	2
5819.	V100020001S91210092100113	12	2	2	-99	2
5823.	V100020003S91230472510113	11	1	2	1	1
5824.	V100020003S91230472510113	12	2	2	1	1
5830.	V100020009S15290025300123	11	1	2	2	2
5831.	V100020009S15290025300123	12	2	2	2	2
5832.	V100020009S77290439400123	11	1	2	1	1
5833.	V100020009S77290439400123	12	2	2	1	1
5838.	V100030000S13300105500123	11	1	2	3	2
5839.	V100030000S13300105500123	12	2	2	3	1
5840.	V100030001S75311570510123	11	1	2	1	2
5841.	V100030001S75311570510123	12	2	2	1	1
5842.	V100030001S90311520010123	11	1	2	1	2
5843.	V100030001S90311520010123	12	2	2	1	2
5845.	V100030005S10350630200113	11	1	2	1	1
5846.	V100030005S10350630200113	12	2	2	1	1
5848.	V100030005S52350803900113	11	1	2	1	2
5849.	V100030005S52350803900113	12	2	2	1	2
5850.	V100030005S53350813010113	11	1	2	1	2
5851.	V100030005S53350813010113	12	2	2	1	2
5856.	V100030007S13370801200123	11	1	2	1	1
5857.	V100030007S13370801200123	12	2	2	1	1

5860.	V100030007S73370556200113	11	1	2	1	2
5861.	V100030007S73370556200113	12	2	2	1	2
5866.	V100030008S98380074210113	11	1	2	5	2
5867.	V100030008S98380074210113	12	2	2	5	2
5868.	V100030068M31040516300123	11	1	2	1	2
5869.	V100030068M31040516300123	12	2	2	1	2
5871.	V100030081M73060785700123	11	1	2	1	1
5872.	V100030081M73060785700123	12	2	2	1	2
5875.	V100030625M16360246500113	11	1	2	1	2
5876.	V100030625M16360246500113	12	2	2	1	2
5883.	V100040000S34401623610113	11	1	2	1	2
5884.	V100040000S34401623610113	12	2	2	1	2
5885.	V100040000S56400612500113	11	1	2	1	2
5886.	V100040000S56400612500113	12	2	2	1	2
5897.	V100040004S70440996600113	11	1	2	1	2
5898.	V100040004S70440996600113	12	2	2	1	2
5900.	V100040005S30450521000123	11	1	2	1	2
5901.	V100040005S30450521000123	12	2	2	1	2
5903.	V100040006S30461844210113	11	1	2	3	2
5904.	V100040006S30461844210113	12	2	2	3	2
5912.	V100040009S50490613000123	11	1	2	1	2
5913.	V100040009S50490613000123	12	2	2	1	2
5914.	V100040009S53490471600123	11	1	2	5	1
5915.	V100040009S53490471600123	12	2	2	1	2
5921.	V100040662M33530690300113	11	1	2	1	2
5922.	V100040662M33530690300113	12	2	2	1	2
5927.	V100040907M10110975300123	11	1	2	1	2
5928.	V100040907M10110975300123	12	2	2	1	2
5940.	V100050005S33551644410123	11	1	2	3	2
5941.	V100050005S33551644410123	12	2	2	3	2
5945.	V100050006S31560763300113	11	1	2	1	2
5946.	V100050006S31560763300113	12	2	2	1	2
5947.	V100050006S52560916800113	11	1	2	1	2
5948.	V100050006S52560916800113	12	2	2	1	2
5950.	V100100001S10011925310123	11	1	2	3	2
5951.	V100100001S10011925310123	12	2	2	3	2
5953.	V100100002S02020843000023	11	1	2	1	2
5954.	V100100002S02020843000023	12	2	2	1	2
5957.	V100100002S22021200600123	11	1	2	5	2
5958.	V100100002S22021200600123	12	2	2	5	2
5961.	V100100005S50050443000013	11	1	2	2	2
5962.	V100100005S50050443000013	12	2	2	2	2
5963.	V100100006S31061676900113	11	1	2	3	1
5964.	V100100006S31061676900113	12	2	2	3	1
5965.	V100100006S58060500700023	11	1	2	1	1
5966.	V100100006S58060500700023	12	2	2	1	1
5973.	V100100008S96080091010113	11	1	2	1	1
5974.	V100100008S96080091010113	12	2	2	1	1
5982.	V100110002S50121965110023	11	1	2	1	1
5983.	V100110002S50121965110023	12	2	2	1	1
5986.	V100110002S71121242310013	11	1	2	1	2
5987.	V100110002S71121242310013	12	2	2	1	2
5996.	V100110005S30150890400023	11	1	2	5	1
5997.	V100110005S30150890400023	12	2	2	5	1


```
.
. *****
. *clean up the data
. *****
.
. tab1 TBIRTH_YEAR, mis
```

-> tabulation of TBIRTH_YEAR

TBIRTH_YEAR	Freq.	Percent	Cum.
1932	625	0.35	0.35
1933	201	0.11	0.46
1934	243	0.14	0.60
1935	308	0.17	0.77
1936	439	0.25	1.02
1937	469	0.26	1.28
1938	663	0.37	1.65
1939	710	0.40	2.05
1940	879	0.49	2.54
1941	1,031	0.58	3.12
1942	1,377	0.77	3.89
1943	1,531	0.86	4.75
1944	1,581	0.89	5.64
1945	1,741	0.98	6.61
1946	2,359	1.32	7.94
1947	2,698	1.51	9.45
1948	2,768	1.55	11.00
1949	2,811	1.58	12.58
1950	2,944	1.65	14.23
1951	3,297	1.85	16.07
1952	3,455	1.94	18.01
1953	3,496	1.96	19.97
1954	3,620	2.03	22.00
1955	3,794	2.13	24.13
1956	3,758	2.11	26.23
1957	3,776	2.12	28.35
1958	3,638	2.04	30.39
1959	3,664	2.05	32.44
1960	3,792	2.13	34.57
1961	3,581	2.01	36.58
1962	3,623	2.03	38.61
1963	3,472	1.95	40.55
1964	3,507	1.97	42.52
1965	3,429	1.92	44.44
1966	3,273	1.83	46.27
1967	3,340	1.87	48.15
1968	3,255	1.82	49.97
1969	3,425	1.92	51.89
1970	3,695	2.07	53.96
1971	3,439	1.93	55.89
1972	3,299	1.85	57.74
1973	3,336	1.87	59.61
1974	3,194	1.79	61.40
1975	3,341	1.87	63.27
1976	3,308	1.85	65.13
1977	3,546	1.99	67.11
1978	3,504	1.96	69.08
1979	3,657	2.05	71.13
1980	3,696	2.07	73.20
1981	3,635	2.04	75.24
1982	3,694	2.07	77.31
1983	3,568	2.00	79.31
1984	3,508	1.97	81.28
1985	3,352	1.88	83.15
1986	3,136	1.76	84.91
1987	2,904	1.63	86.54
1988	2,882	1.62	88.16
1989	2,643	1.48	89.64
1990	2,583	1.45	91.09
1991	2,295	1.29	92.37
1992	2,033	1.14	93.51
1993	1,921	1.08	94.59
1994	1,699	0.95	95.54
1995	1,575	0.88	96.42
1996	1,336	0.75	97.17
1997	1,168	0.65	97.83
1998	1,014	0.57	98.40
1999	867	0.49	98.88
2000	831	0.47	99.35
2001	660	0.37	99.72
2002	505	0.28	100.00
Total	178,397	100.00	

```
. gen agegroup = TBIRTH_YEAR
. recode agegroup (1930/1940.1 = 7) (1940.2/1950.1 = 6) (1950.2/1960.1 = 5) (1960.2/1970.1 = 4) (1970.2/1980.1 = 3) (198
(agegroup: 178397 changes made)
```

```
. tab2 TBIRTH_YEAR agegroup, mis
```

```
-> tabulation of TBIRTH_YEAR by agegroup
```

TBIRTH_YEA R	agegroup							Total
	1	2	3	4	5	6	7	
1932	0	0	0	0	0	0	625	625
1933	0	0	0	0	0	0	201	201
1934	0	0	0	0	0	0	243	243
1935	0	0	0	0	0	0	308	308
1936	0	0	0	0	0	0	439	439
1937	0	0	0	0	0	0	469	469
1938	0	0	0	0	0	0	663	663
1939	0	0	0	0	0	0	710	710
1940	0	0	0	0	0	0	879	879
1941	0	0	0	0	0	1,031	0	1,031
1942	0	0	0	0	0	1,377	0	1,377
1943	0	0	0	0	0	1,531	0	1,531
1944	0	0	0	0	0	1,581	0	1,581
1945	0	0	0	0	0	1,741	0	1,741
1946	0	0	0	0	0	2,359	0	2,359
1947	0	0	0	0	0	2,698	0	2,698
1948	0	0	0	0	0	2,768	0	2,768
1949	0	0	0	0	0	2,811	0	2,811
1950	0	0	0	0	0	2,944	0	2,944
1951	0	0	0	0	3,297	0	0	3,297
1952	0	0	0	0	3,455	0	0	3,455
1953	0	0	0	0	3,496	0	0	3,496
1954	0	0	0	0	3,620	0	0	3,620
1955	0	0	0	0	3,794	0	0	3,794
1956	0	0	0	0	3,758	0	0	3,758
1957	0	0	0	0	3,776	0	0	3,776
1958	0	0	0	0	3,638	0	0	3,638
1959	0	0	0	0	3,664	0	0	3,664
1960	0	0	0	0	3,792	0	0	3,792
1961	0	0	0	3,581	0	0	0	3,581
1962	0	0	0	3,623	0	0	0	3,623
1963	0	0	0	3,472	0	0	0	3,472
1964	0	0	0	3,507	0	0	0	3,507
1965	0	0	0	3,429	0	0	0	3,429
1966	0	0	0	3,273	0	0	0	3,273
1967	0	0	0	3,340	0	0	0	3,340
1968	0	0	0	3,255	0	0	0	3,255
1969	0	0	0	3,425	0	0	0	3,425
1970	0	0	0	3,695	0	0	0	3,695
1971	0	0	3,439	0	0	0	0	3,439
1972	0	0	3,299	0	0	0	0	3,299
1973	0	0	3,336	0	0	0	0	3,336
1974	0	0	3,194	0	0	0	0	3,194
1975	0	0	3,341	0	0	0	0	3,341
1976	0	0	3,308	0	0	0	0	3,308
1977	0	0	3,546	0	0	0	0	3,546
1978	0	0	3,504	0	0	0	0	3,504
1979	0	0	3,657	0	0	0	0	3,657
1980	0	0	3,696	0	0	0	0	3,696
1981	0	3,635	0	0	0	0	0	3,635
1982	0	3,694	0	0	0	0	0	3,694
1983	0	3,568	0	0	0	0	0	3,568
1984	0	3,508	0	0	0	0	0	3,508
1985	0	3,352	0	0	0	0	0	3,352
1986	0	3,136	0	0	0	0	0	3,136
1987	0	2,904	0	0	0	0	0	2,904
1988	0	2,882	0	0	0	0	0	2,882
1989	0	2,643	0	0	0	0	0	2,643
1990	0	2,583	0	0	0	0	0	2,583
1991	2,295	0	0	0	0	0	0	2,295
1992	2,033	0	0	0	0	0	0	2,033
1993	1,921	0	0	0	0	0	0	1,921
1994	1,699	0	0	0	0	0	0	1,699
1995	1,575	0	0	0	0	0	0	1,575
1996	1,336	0	0	0	0	0	0	1,336
1997	1,168	0	0	0	0	0	0	1,168
1998	1,014	0	0	0	0	0	0	1,014
1999	867	0	0	0	0	0	0	867
2000	831	0	0	0	0	0	0	831
2001	660	0	0	0	0	0	0	660

2002	505	0	0	0	0	0	0	505
Total	15,904	31,905	34,320	34,600	36,290	20,841	4,537	178,397

```
.
.
. tab1 income, mis
-> tabulation of income
```

income	Freq.	Percent	Cum.
-99	3,769	2.11	2.11
1	17,405	9.76	11.87
2	14,627	8.20	20.07
3	17,760	9.96	30.02
4	27,698	15.53	45.55
5	22,807	12.78	58.33
6	27,372	15.34	73.68
7	12,642	7.09	80.76
8	14,628	8.20	88.96
.m	19,689	11.04	100.00
Total	178,397	100.00	

```
. gen newincome = 1
. replace newincome = 0 if inrange(income,1,4)
(77,490 real changes made)
. replace newincome =. if inlist(income,-99, .m)
(23,458 real changes made, 23,458 to missing)
. tab2 income newincome, mis
```

```
-> tabulation of income by newincome
```

income	newincome		.	Total
	0	1		
-99	0	0	3,769	3,769
1	17,405	0	0	17,405
2	14,627	0	0	14,627
3	17,760	0	0	17,760
4	27,698	0	0	27,698
5	0	22,807	0	22,807
6	0	27,372	0	27,372
7	0	12,642	0	12,642
8	0	14,628	0	14,628
.m	0	0	19,689	19,689
Total	77,490	77,449	23,458	178,397

```
.
. *****
. * Adjustment to the personal weights
. *****
.
. gen pweight_11_12 = pweight/2
. label variable pweight_11_12 "new personal weights for weeks 11 and 12"
```

```
.
. *****
. * The use of SVY and Subpop commands to get the correct estimated parameters
. *****
```

```
. gen valid1 = 1
. replace valid1 =0 if newincome ==. | agegroup ==.
(23,458 real changes made)
. tab1 valid1, mis
```

```
-> tabulation of valid1
```

valid1	Freq.	Percent	Cum.
0	23,458	13.15	13.15

1	154,939	86.85	100.00
Total	178,397	100.00	

```
. svyset [iw=pweight_11_12], jkrweight(PWEIGHT1- PWEIGHT80, multiplier(.05)) ///
> vce(jackknife) mse
```

```
iwweight: pweight_11_12
VCE: jackknife
MSE: on
jkrweight: PWEIGHT1 PWEIGHT2 PWEIGHT3 PWEIGHT4 PWEIGHT5 PWEIGHT6 PWEIGHT7 PWEIGHT8 PWEIGHT9 PWEIGHT10 PWEIGHT11 PWEI
PWEIGHT18 PWEIGHT19 PWEIGHT20 PWEIGHT21 PWEIGHT22 PWEIGHT23 PWEIGHT24 PWEIGHT25 PWEIGHT26 PWEIGHT27 PWEIG
PWEIGHT34 PWEIGHT35 PWEIGHT36 PWEIGHT37 PWEIGHT38 PWEIGHT39 PWEIGHT40 PWEIGHT41 PWEIGHT42 PWEIGHT43 PWEIG
PWEIGHT50 PWEIGHT51 PWEIGHT52 PWEIGHT53 PWEIGHT54 PWEIGHT55 PWEIGHT56 PWEIGHT57 PWEIGHT58 PWEIGHT59 PWEIG
PWEIGHT66 PWEIGHT67 PWEIGHT68 PWEIGHT69 PWEIGHT70 PWEIGHT71 PWEIGHT72 PWEIGHT73 PWEIGHT74 PWEIGHT75 PWEIG
Single unit: missing
Strata 1: <one>
SU 1: <observations>
FPC 1: <zero>
```

```
. svy, subpop(valid1): tab newincome agegroup
(running tabulate on estimation sample)
```

Number of strata	=	1	Number of obs	=	178,397
			Population size	=	249,170,916
			Subpop. no. obs	=	154,939
			Subpop. size	=	214,899,799
			Replications	=	80
			Design df	=	79

newincome	agegroup							Total
	1	2	3	4	5	6	7	
0	.1209	.1108	.0887	.0923	.11	.0616	.0169	.6011
1	.046	.0766	.0804	.0809	.0734	.0347	.0068	.3989
Total	.1669	.1874	.1691	.1733	.1834	.0963	.0236	1

Key: cell proportion

Pearson:
 Uncorrected chi2(6) = 3565.4450
 Design-based F(5.31, 419.33) = 84.8266 P = 0.0000

```
. svy, subpop(valid1): logit newincome agegroup
(running logit on estimation sample)
```

Jackknife replications (80)
 ----- 1 ----- 2 ----- 3 ----- 4 ----- 5
 50

Survey: Logistic regression

Number of strata	=	1	Number of obs	=	178,397
			Population size	=	249,170,916
			Subpop. no. obs	=	154,939
			Subpop. size	=	214,899,799
			Replications	=	80
			Design df	=	79
			F(1, 79)	=	42.66
			Prob > F	=	0.0000

newincome	Coef.	Jknife *		t	P> t	[95% Conf. Interval]	
		Std. Err.					
agegroup	.0436531	.0066835		6.53	0.000	.0303499	.0569564
_cons	-.5591177	.0274983		-20.33	0.000	-.6138517	-.5043836

 * If the subpop option is not used, the estimated standard errors of the parameters are not correct

```
. svy: tab newincome agegroup
(running tabulate on estimation sample)
```

Number of strata	=	1	Number of obs	=	154,939
------------------	---	---	---------------	---	---------

Population size = 214,899,799
 Replications = 80
 Design df = 79

```
-----+-----
```

newincome	agegroup							Total
	1	2	3	4	5	6	7	
0	.1209	.1108	.0887	.0923	.11	.0616	.0169	.6011
1	.046	.0766	.0804	.0809	.0734	.0347	.0068	.3989
Total	.1669	.1874	.1691	.1733	.1834	.0963	.0236	1

```
-----+-----
```

Key: cell proportion

Pearson:
 Uncorrected chi2(6) = 3096.6130
 Design-based F(5.31, 419.33) = 84.8266 P = 0.0000

. svy: logit newincome agegroup
 (running logit on estimation sample)

Jackknife replications (80)
 -----+----- 1 -----+----- 2 -----+----- 3 -----+----- 4 -----+----- 5
 50

Survey: Logistic regression

Number of strata = 1
 Number of obs = 154,939
 Population size = 214,899,799
 Replications = 80
 Design df = 79
 F(1, 79) = 42.66
 Prob > F = 0.0000

```
-----+-----
```

newincome	Coef.	Jknife *		t	P> t	[95% Conf. Interval]	
		Std. Err.					
agegroup	.0436531	.0066835		6.53	0.000	.0303499	.0569564
_cons	-.5591177	.0274983		-20.33	0.000	-.6138517	-.5043836

```
-----+-----
```

 * If the new weight variable is not used, tthe estimated standard errors of the parameters are not correct

. svyset [iw=pweight], jkrweight(PWEIGHT1- PWEIGHT80, multiplier(.05)) ///
 > vce(jackknife) mse

iweight: pweight
 VCE: jackknife
 MSE: on

jkrweight: PWEIGHT1 PWEIGHT2 PWEIGHT3 PWEIGHT4 PWEIGHT5 PWEIGHT6 PWEIGHT7 PWEIGHT8 PWEIGHT9 PWEIGHT10 PWEIGHT11 PWEI
 PWEIGHT18 PWEIGHT19 PWEIGHT20 PWEIGHT21 PWEIGHT22 PWEIGHT23 PWEIGHT24 PWEIGHT25 PWEIGHT26 PWEIGHT27 PWEIG
 PWEIGHT34 PWEIGHT35 PWEIGHT36 PWEIGHT37 PWEIGHT38 PWEIGHT39 PWEIGHT40 PWEIGHT41 PWEIGHT42 PWEIGHT43 PWEIG
 PWEIGHT50 PWEIGHT51 PWEIGHT52 PWEIGHT53 PWEIGHT54 PWEIGHT55 PWEIGHT56 PWEIGHT57 PWEIGHT58 PWEIGHT59 PWEIG
 PWEIGHT66 PWEIGHT67 PWEIGHT68 PWEIGHT69 PWEIGHT70 PWEIGHT71 PWEIGHT72 PWEIGHT73 PWEIGHT74 PWEIGHT75 PWEIG

Single unit: missing
 Strata 1: <one>
 SU 1: <observations>
 FPC 1: <zero>

. svy, subpop(valid1): tab newincome agegroup
 (running tabulate on estimation sample)

Number of strata = 1
 Number of obs = 178,397
 Population size = 498,341,832
 Subpop. no. obs = 154,939
 Subpop. size = 429,799,598
 Replications = 79
 Design df = 78

```
-----+-----
```

newincome	agegroup							Total
	1	2	3	4	5	6	7	
0	.1209	.1108	.0887	.0923	.11	.0616	.0169	.6011
1	.046	.0766	.0804	.0809	.0734	.0347	.0068	.3989
Total	.1669	.1874	.1691	.1733	.1834	.0963	.0236	1

```
-----+-----
```

 Key: cell proportion

Pearson:
 Uncorrected chi2(6) = 3565.4450
 Design-based F(5.31, 414.02) = 84.8266 P = 0.0000

. svy, subpop(valid1): logit newincome agegroup
 (running logit on estimation sample)

Jackknife replications (80)
 -----+--- 1 -----+--- 2 -----+--- 3 -----+--- 4 -----+--- 5
 s..... 50

Survey: Logistic regression

Number of strata = 1
 Number of obs = 178,397
 Population size = 498,341,832
 Subpop. no. obs = 154,939
 Subpop. size = 429,799,598
 Replications = 79
 Design df = 78
 F(1, 78) = 42.66
 Prob > F = 0.0000

newincome	Coef.	Jknife * Std. Err.	t	P> t	[95% Conf. Interval]	
agegroup	.0436531	.0066835	6.53	0.000	.0303473	.056959
_cons	-.5591177	.0274983	-20.33	0.000	-.6138627	-.5043727

.
 .
 . log close
 name: <unnamed>
 log: d:\temp\hps.log
 log type: text
 closed on: 5 Oct 2020, 10:30:41
