

**Technical Appendix I: Stata Tax Programs Used to Generate Effective Taxes Paid and Marginal Tax Rates for
“Household Labor Supply and Taxes: A Nonparametric, Revealed Preference Approach” by Melissa Famulari**

Federal Income tax bracket data came from IRS Document 6538, Tax Rates and Tax Tables for Prior Years. 1987.

Federal standard deductions and exemptions came from the World Almanac, 1984, 1985, 1986, and 1987.

State Income tax bracket data came from the World Almanac for the years 1984, 1985, 1986, 1987, the Significant Features of Fiscal Federalism, U.S Advisory Commission on Intergovernmental Relations (ACIR), or from footnotes to the Statistical Abstract for the years 1981, 1983, 1984, and 1985. The information on state exemptions and deductions came from the Statistical Abstract for the years 1981, 1983, 1984, and 1985. I was unable to find the state exemptions and deductions for 1982. Five states had different deductions or exemptions for 1981 and 1983: California, Colorado, Georgia, Hawaii (single people only) and Minnesota. I used 1983 state exemption and deductions for 1982.

City tax data was obtain from the ACIR for the years 1984 and 1985 and from the World Almanac for the years 1982, 1984, and 1985.

These two sources were consistent except for Philadelphia and Pittsburg and I used the ACIR data. New York City has a graduated income tax. I know the range of tax rates (e.g., .9 to 4.3%) from the above sources, but not the incomes brackets to which these rates apply. 1987 (published in the CCH State Tax Reporter) is the first year I know the NYC income brackets. I used these income brackets for 1982-85.

Stata Program for Married, Dual Earner Couples:

```
gen ficatxpdm=.
label variable ficatxpdm "Fica taxes paid: earner 1"
gen ficamtrm=0
label variable ficamtrm "Marginal Fica tax rate: earner 1"

replace ficamtrm=.067 if year ==82 & earnm>0 & earnm<=32400
replace ficatxpdm=.067*earnm if year==82 & earnm<=32400
replace ficatxpdm=.067*32400 if year==82 & earnm>32400
replace ficamtrm=.067 if year ==83 & earnm>0 & earnm<=35700
replace ficatxpdm=.067*earnm if year==83 & earnm<=35700
replace ficatxpdm=.067*35700 if year==83 & earnm>35700
replace ficamtrm=.067 if year ==84 & earnm>0 & earnm<=37800
replace ficatxpdm=.067*earnm if year==84 & earnm<=37800
replace ficatxpdm=.067*37800 if year==84 & earnm>37800
replace ficamtrm=.0705 if year ==85 & earnm>0 & earnm<=39600
replace ficatxpdm=.0705*earnm if year==85 & earnm<=39600
replace ficatxpdm=.0705*39600 if year==85 & earnm> 39600
```

```

gen ficatxpdw=.
label variable ficatxpdw "Fica taxes paid: earner 2"
gen ficamtrw=0
label variable ficamtrw "Marginal Fica tax rate: earner 2"

replace ficamtrw=.067 if year ==82 & earnw>0 & earnw<=32400
replace ficatxpdw=.067*earnw if year==82 & earnw<=32400
replace ficatxpdw=.067*32400 if year==82 & earnw>32400
replace ficamtrw=.067 if year ==83 & earnw>0 & earnw<=35700
replace ficatxpdw=.067*earnw if year==83 & earnw<=35700
replace ficatxpdw=.067*35700 if year==83 & earnw>35700
replace ficamtrw=.067 if year ==84 & earnw>0 & earnw<=37800
replace ficatxpdw=.067*earnw if year==84 & earnw<=37800
replace ficatxpdw=.067*37800 if year==84 & earnw>37800
replace ficamtrw=.0705 if year ==85 & earnw>0 & earnw<=39600
replace ficatxpdw=.0705*earnw if year==85 & earnw<=39600
replace ficatxpdw=.0705*39600 if year==85 & earnw> 39600

```

*Computing Federal taxable income. In 82, 83, and 84, \$1000 personal exemption, \$3400 standard deduction
*for Married Filing Jointly (MFJ). In 1985, \$1040 personal exemption + \$3540 standard deduction.

```

gen yf= earnm+earnw-3400-1000*fam_size if year<=84
label variable yf "Federal taxable income"
replace yf= earnm+earnw-3540-1040*fam_size if year==85

```

```

gen fedmtr = .
label variable fedmtr "Federal marginal tax rate"
gen fbase=.
label variable fbase "Fed taxes at lower bound"
gen fedlb=.
label variable fedlb "Federal lower bound of bracket"

```

```

replace fedmtr = 0 if year==85 & yf<=3540
replace fbase = 0 if year==85 & yf<=3540
replace fedlb = 0 if year==85 & yf<=3540
replace fedmtr =.11 if year==85 & yf> 3540 & yf<=5720
replace fbase = 0 if year==85 & yf> 3540 & yf<=5720
replace fedlb = 3540 if year==85 & yf> 3540 & yf<=5720
replace fedmtr =.12 if year==85 & yf> 5720 & yf<=7910
replace fbase =239.8 if year==85 & yf> 5720 & yf<=7910
replace fedlb = 5720 if year==85 & yf> 5720 & yf<=7910
replace fedmtr = .14 if year==85 & yf> 7910 & yf<=12390
replace fbase = 502.60 if year==85 & yf> 7910 & yf<=12390
replace fedlb = 7910 if year==85 & yf> 7910 & yf<=12390
replace fedmtr = .16 if year==85 & yf>12390 & yf<=16650
replace fbase =1129.80 if year==85 & yf>12390 & yf<=16650
replace fedlb =12390 if year==85 & yf>12390 & yf<=16650
replace fedmtr = .18 if year==85 & yf>16650 & yf<=21020
replace fbase = 1811.4 if year==85 & yf>16650 & yf<=21020
replace fedlb =16650 if year==85 & yf>16650 & yf<=21020
replace fedmtr = .22 if year==85 & yf>21020 & yf<=25600
replace fbase = 2598 if year==85 & yf>21020 & yf<=25600
replace fedlb = 21020 if year==85 & yf>21020 & yf<=25600
replace fedmtr = .25 if year==85 & yf>25600 & yf<=31120
replace fbase = 3605.6 if year==85 & yf>25600 & yf<=31120
replace fedlb = 25600 if year==85 & yf>25600 & yf<=31120
replace fedmtr = .28 if year==85 & yf>31120 & yf<=36630
replace fbase = 4985.6 if year==85 & yf>31120 & yf<=36630
replace fedlb = 31120 if year==85 & yf>31120 & yf<=36630
replace fedmtr = .33 if year==85 & yf>36630 & yf<=47670
replace fbase = 6528.4 if year==85 & yf>36630 & yf<=47670
replace fedlb = 36630 if year==85 & yf>36630 & yf<=47670
replace fedmtr = .38 if year==85 & yf>47670 & yf<=62450

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```
replace fbase = 10171.6 if year==85 & yf>47670 & yf<=62450
replace fedlb = 47670 if year==85 & yf>47670 & yf<=62450
replace fedmtr = .42 if year==85 & yf>62450 & yf<=89090
replace fbase = 15788 if year==85 & yf>62450 & yf<=89090
replace fedlb = 62450 if year==85 & yf>62450 & yf<=89090
replace fedmtr = .45 if year==85 & yf>89090 & yf<=113860
replace fbase = 36976.8 if year==85 & yf>89090 & yf<=113860
replace fedlb = 89090 if year==85 & yf>89090 & yf<=113860
replace fedmtr = .49 if year==85 & yf>113860 & yf<=169020
replace fbase =38123.3 if year==85 & yf>113860 & yf<=169020
replace fedlb =113860 if year==85 & yf>113860 & yf<=169020
replace fedmtr = .50 if year==85 & yf>169020
replace fbase =65151.7 if year==85 & yf>169020
replace fedlb =169020 if year==85 & yf>169020
replace fedmtr = 0 if year==84 & yf<= 3400
replace fbase = 0 if year==84 & yf<= 3400
replace fedlb = 0 if year==84 & yf<= 3400
replace fedmtr = .11 if year==84 & yf> 3400 & yf<=5500
replace fbase = 0 if year==84 & yf> 3400 & yf<=5500
replace fedlb = 3400 if year==84 & yf> 3400 & yf<=5500
replace fedmtr = .12 if year==84 & yf> 5500 & yf<=7600
replace fbase = 231 if year==84 & yf> 5500 & yf<=7600
replace fedlb = 5500 if year==84 & yf> 5500 & yf<=7600
replace fedmtr = .14 if year==84 & yf> 7600 & yf<=11900
replace fbase = 483 if year==84 & yf> 7600 & yf<=11900
replace fedlb = 7600 if year==84 & yf> 7600 & yf<=11900
replace fedmtr = .16 if year==84 & yf> 11900 & yf<=16000
replace fbase = 1085 if year==84 & yf> 11900 & yf<=16000
replace fedlb = 11900 if year==84 & yf> 11900 & yf<=16000
replace fedmtr = .18 if year==84 & yf> 16000 & yf<=20200
replace fbase = 1741 if year==84 & yf> 16000 & yf<=20200
replace fedlb = 16000 if year==84 & yf> 16000 & yf<=20200
replace fedmtr = .22 if year==84 & yf> 20200 & yf<=24600
replace fbase = 2497 if year==84 & yf> 20200 & yf<=24600
replace fedlb = 20200 if year==84 & yf> 20200 & yf<=24600
replace fedmtr = .25 if year==84 & yf> 24600 & yf<=29900
replace fbase = 3465 if year==84 & yf> 24600 & yf<=29900
replace fedlb = 24600 if year==84 & yf> 24600 & yf<=29900
replace fedmtr = .28 if year==84 & yf> 29900 & yf<= 35200
replace fbase = 4790 if year==84 & yf> 29900 & yf<= 35200
replace fedlb = 29900 if year==84 & yf> 29900 & yf<= 35200
replace fedmtr = .33 if year==84 & yf> 35200 & yf<= 45800
replace fbase = 6274 if year==84 & yf> 35200 & yf<= 45800
replace fedlb = 35200 if year==84 & yf> 35200 & yf<= 45800
replace fedmtr = .38 if year==84 & yf> 45800 & yf<= 60000
replace fbase = 9772 if year==84 & yf> 45800 & yf<= 60000
replace fedlb = 45800 if year==84 & yf> 45800 & yf<= 60000
replace fedmtr = .42 if year==84 & yf> 60000 & yf<= 85600
replace fbase = 15168 if year==84 & yf> 60000 & yf<= 85600
replace fedlb = 60000 if year==84 & yf> 60000 & yf<= 85600
replace fedmtr = .45 if year==84 & yf> 85600 & yf<=109400
replace fbase = 25920 if year==84 & yf> 85600 & yf<=109400
replace fedlb = 85600 if year==84 & yf> 85600 & yf<=109400
replace fedmtr = .49 if year==84 & yf>109400 & yf<=162400
replace fbase = 36630 if year==84 & yf>109400 & yf<=162400
replace fedlb = 109400 if year==84 & yf>109400 & yf<=162400
replace fedmtr = .50 if year==84 & yf>162400
replace fbase = 62600 if year==84 & yf>162400
replace fedlb = 162400 if year==84 & yf>162400
replace fedmtr = 0 if year==83 & yf<= 3400
replace fbase = 0 if year==83 & yf<= 3400
replace fedlb = 0 if year==83 & yf<= 3400
replace fedmtr = .11 if year==83 & yf> 3400 & yf<= 5500
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```
replace fbase = 0      if year==83 & yf> 3400 & yf<= 5500
replace fedlb = 3400  if year==83 & yf> 3400 & yf<= 5500
replace fedmtr = .13  if year==83 & yf> 5500 & yf<= 7600
replace fbase = 231   if year==83 & yf> 5500 & yf<= 7600
replace fedlb = 5500  if year==83 & yf> 5500 & yf<= 7600
replace fedmtr = .15  if year==83 & yf> 7600 & yf<=11900
replace fbase = 504   if year==83 & yf> 7600 & yf<=11900
replace fedlb = 7600  if year==83 & yf> 7600 & yf<=11900
replace fedmtr = .17  if year==83 & yf> 11900 & yf<= 16000
replace fbase = 1149  if year==83 & yf> 11900 & yf<= 16000
replace fedlb = 11900 if year==83 & yf> 11900 & yf<= 16000
replace fedmtr = .19  if year==83 & yf> 16000 & yf<= 20200
replace fbase = 1846  if year==83 & yf> 16000 & yf<= 20200
replace fedlb = 16000 if year==83 & yf> 16000 & yf<= 20200
replace fedmtr = .23  if year==83 & yf> 20200 & yf<= 24600
replace fbase = 2644  if year==83 & yf> 20200 & yf<= 24600
replace fedlb = 20200 if year==83 & yf> 20200 & yf<= 24600
replace fedmtr = .26  if year==83 & yf> 24600 & yf<= 29900
replace fbase = 3656  if year==83 & yf> 24600 & yf<= 29900
replace fedlb = 24600 if year==83 & yf> 24600 & yf<= 29900
replace fedmtr = .30  if year==83 & yf> 29900 & yf<= 35200
replace fbase = 5034  if year==83 & yf> 29900 & yf<= 35200
replace fedlb = 29900 if year==83 & yf> 29900 & yf<= 35200
replace fedmtr = .35  if year==83 & yf> 35200 & yf<= 45800
replace fbase = 6624  if year==83 & yf> 35200 & yf<= 45800
replace fedlb = 35200 if year==83 & yf> 35200 & yf<= 45800
replace fedmtr = .40  if year==83 & yf> 45800 & yf<= 60000
replace fbase = 10334 if year==83 & yf> 45800 & yf<= 60000
replace fedlb = 45800 if year==83 & yf> 45800 & yf<= 60000
replace fedmtr = .44  if year==83 & yf> 60000 & yf<= 85600
replace fbase = 16014 if year==83 & yf> 60000 & yf<= 85600
replace fedlb = 60000 if year==83 & yf> 60000 & yf<= 85600
replace fedmtr = .48  if year==83 & yf> 85600 & yf<=109400
replace fbase = 27278 if year==83 & yf> 85600 & yf<=109400
replace fedlb = 85600 if year==83 & yf> 85600 & yf<=109400
replace fedmtr = .50  if year==83 & yf> 109400
replace fbase = 38702 if year==83 & yf> 109400
replace fedlb = 109400 if year==83 & yf> 109400
replace fedmtr = 0     if year==82 & yf<= 3400
replace fbase = 0     if year==82 & yf<= 3400
replace fedlb = 0     if year==82 & yf<= 3400
replace fedmtr = .12  if year==82 & yf> 3400 & yf<= 5500
replace fbase = 0     if year==82 & yf> 3400 & yf<= 5500
replace fedlb = 3400  if year==82 & yf> 3400 & yf<= 5500
replace fedmtr = .14  if year==82 & yf> 5500 & yf<= 7600
replace fbase = 252   if year==82 & yf> 5500 & yf<= 7600
replace fedlb = 5500  if year==82 & yf> 5500 & yf<= 7600
replace fedmtr = .16  if year==82 & yf> 7600 & yf<=11900
replace fbase = 546   if year==82 & yf> 7600 & yf<=11900
replace fedlb = 7600  if year==82 & yf> 7600 & yf<=11900
replace fedmtr = .19  if year==82 & yf> 11900 & yf<= 16000
replace fbase = 1234  if year==82 & yf> 11900 & yf<= 16000
replace fedlb = 11900 if year==82 & yf> 11900 & yf<= 16000
replace fedmtr = .22  if year==82 & yf> 16000 & yf<= 20200
replace fbase = 2013  if year==82 & yf> 16000 & yf<= 20200
replace fedlb = 16000 if year==82 & yf> 16000 & yf<= 20200
replace fedmtr = .25  if year==82 & yf> 20200 & yf<= 24600
replace fbase = 2937  if year==82 & yf> 20200 & yf<= 24600
replace fedlb = 20200 if year==82 & yf> 20200 & yf<= 24600
replace fedmtr = .29  if year==82 & yf> 24600 & yf<= 29900
replace fbase = 4037  if year==82 & yf> 24600 & yf<= 29900
replace fedlb = 24600 if year==82 & yf> 24600 & yf<= 29900
replace fedmtr = .33  if year==82 & yf> 29900 & yf<= 35200
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replace fbase = 5574 if year==82 & yf> 29900 & yf<= 35200
replace fedlb = 29900 if year==82 & yf> 29900 & yf<= 35200
replace fedmtr = .39 if year==82 & yf> 35200 & yf<= 45800
replace fbase = 7323 if year==82 & yf> 35200 & yf<= 45800
replace fedlb = 35200 if year==82 & yf> 35200 & yf<= 45800
replace fedmtr = .44 if year==82 & yf> 45800 & yf<= 60000
replace fbase = 11457 if year==82 & yf> 45800 & yf<= 60000
replace fedlb = 45800 if year==82 & yf> 45800 & yf<= 60000
replace fedmtr = .49 if year==82 & yf> 60000 & yf<= 85600
replace fbase = 17705 if year==82 & yf> 60000 & yf<= 85600
replace fedlb = 60000 if year==82 & yf> 60000 & yf<= 85600
replace fedmtr = .50 if year==82 & yf> 85600
replace fbase =30249 if year==82 & yf> 85600
replace fedlb =85600 if year==82 & yf> 85600

```

```

gen fedtxpd=0
label variable fedtxpd "Federal Taxes paid"
replace fedtxpd=fbase+(yf-fedlb)*fedmtr

```

```

*State Taxes.
gen stexper=0
label variable stexp "state exemption: individual"
gen stcrper=0
label variable stcrper "state tax credit: individual "
gen stcrdep=0
label variable stcrdep "state tax credit: dependents"
gen sstded=0
label variable sstded "State standard deduction"
gen stexdep=0
label variable stexdep "State exemptions for dependents"
gen ys=0
label variable ys "State taxable income"
gen smtr = 0
label variable smtr "State marginal tax rate"
gen sbase=0
label variable sbase "State taxes at lower bound"
gen slb=0
label variable slb "State lower bound of bracket"
gen staxpd=.
label variable staxpd "state taxes paid"

```

*No state taxes: Alaska (1427), Texas (1316, 1318), Washington (1423). Note: DC is 1315.

```

replace staxpd=0 if (psu==1427 | psu==1316 | psu==1318 | psu==1423)

```

```

*California
*Federal income taxes are not tax deductible
*For MFJ, tax credit of $32 per person and $10 per dependent in 1981. Standard deduction is $1400*2
*Tax credit of $38 per person and $12 per dependent in 1983, MFJ standard deduction is $1510*2
*Tax credit of $40 per person and $13 per dependent in 84-85, MFJ standard deduction is $1580*2

```

```

replace stcrper=35 if (psu==1421| psu==1422| psu==1424) & year==82
replace stcrper=38 if (psu==1421| psu==1422| psu==1424) & (year==83 |year==84)
replace stcrper=40 if (psu==1421| psu==1422| psu==1424) & year==84
replace stcrper=42 if (psu==1421| psu==1422| psu==1424) & year==85
replace stcrdep=11 if (psu==1421| psu==1422| psu==1424) & year==82
replace stcrdep=12 if (psu==1421| psu==1422| psu==1424) & year==83
replace stcrdep=13 if (psu==1421| psu==1422| psu==1424) & (year==85|year==84)

```

```

replace ys= earnm+earnw-3020 if (psu==1421| psu==1422| psu==1424) & year<=83
replace ys=(earnm+earnw-3020)/2 if (psu==1421| psu==1422| psu==1424) & year==84
replace ys=(earnm+earnw-3160)/2 if (psu==1421| psu==1422| psu==1424) & year==85

```



```

replace slb=21760 if ys>21760 & ys<=24180 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.10 if ys>24180 & ys<=26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=1097.7 if ys>24180 & ys<=26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=24180 if ys>24180 & ys<=26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.11 if ys>26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=1339.7 if ys>26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=26600 if ys>26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)

```

```

replace staxpd=sbase+(ys-slb)*smtr-2*stcrper-(fam_size-2)*stcrdep if year<84 &
(psu==1421 | psu==1422 | psu==1424)
replace staxpd=(sbase+(ys-slb)*smtr)*2-2*stcrper-(fam_size-2)*stcrdep if year>=84 &
(psu==1421 | psu==1422 | psu==1424)

```

*Colorado: Federal taxes are deductible

```

replace stexper=850 if psu==1433 | psu==2433
replace ys=earnm+earnw-fam_size*stexper -1415- fedtxpd if (psu==1433 | psu==2433) & year<=84
replace ys=earnm+earnw-fam_size*stexper -1420- fedtxpd if (psu==1433 | psu==2433) & year==85
replace smtr=.025 if ys<=1415 & (psu==1433 | psu==2433) & year<=83
replace smtr=.03 if ys>1415 & ys<=2831 & (psu==1433 | psu==2433) & year<=83
replace sbase=35.38 if ys>1415 & ys<=2831 & (psu==1433 | psu==2433) & year<=83
replace slb=1415 if ys>1415 & ys<=2831 & (psu==1433 | psu==2433) & year<=83
replace smtr=.035 if ys>2831 & ys<=4246 & (psu==1433 | psu==2433) & year<=83
replace sbase=77.86 if ys>2831 & ys<=4246 & (psu==1433 | psu==2433) & year<=83
replace slb=2831 if ys>2831 & ys<=4246 & (psu==1433 | psu==2433) & year<=83
replace smtr=.04 if ys>4246 & ys<=5661 & (psu==1433 | psu==2433) & year<=83
replace sbase=127.38 if ys>4246 & ys<=5661 & (psu==1433 | psu==2433) & year<=83
replace slb=4246 if ys>4246 & ys<=5661 & (psu==1433 | psu==2433) & year<=83
replace smtr=.045 if ys>5661 & ys<=7076 & (psu==1433 | psu==2433) & year<=83
replace sbase=183.98 if ys>5661 & ys<=7076 & (psu==1433 | psu==2433) & year<=83
replace slb=5661 if ys>5661 & ys<=7076 & (psu==1433 | psu==2433) & year<=83
replace smtr=.05 if ys>7076 & ys<=8492 & (psu==1433 | psu==2433) & year<=83
replace sbase=247.66 if ys>7076 & ys<=8492 & (psu==1433 | psu==2433) & year<=83
replace slb=7076 if ys>7076 & ys<=8492 & (psu==1433 | psu==2433) & year<=83
replace smtr=.055 if ys>8492 & ys<=9907 & (psu==1433 | psu==2433) & year<=83
replace sbase=318.46 if ys>8492 & ys<=9907 & (psu==1433 | psu==2433) & year<=83
replace slb=8492 if ys>8492 & ys<=9907 & (psu==1433 | psu==2433) & year<=83
replace smtr=.06 if ys>9907 & ys<=11322 & (psu==1433 | psu==2433) & year<=83
replace sbase=396.28 if ys>9907 & ys<=11322 & (psu==1433 | psu==2433) & year<=83
replace slb=9907 if ys>9907 & ys<=11322 & (psu==1433 | psu==2433) & year<=83
replace smtr=.065 if ys>11322 & ys<=12738 & (psu==1433 | psu==2433) & year<=83
replace sbase=481.18 if ys>11322 & ys<=12738 & (psu==1433 | psu==2433) & year<=83
replace slb=11322 if ys>11322 & ys<=12738 & (psu==1433 | psu==2433) & year<=83
replace smtr=.075 if ys>12738 & ys<=14153 & (psu==1433 | psu==2433) & year<=83
replace sbase=573.22 if ys>12738 & ys<=14153 & (psu==1433 | psu==2433) & year<=83
replace slb=12738 if ys>12738 & ys<=14153 & (psu==1433 | psu==2433) & year<=83
replace smtr=.08 if ys>14153 & (psu==1433 | psu==2433) & year<=83
replace sbase=679.35 if ys>14153 & (psu==1433 | psu==2433) & year<=83
replace slb=14153 if ys>14153 & (psu==1433 | psu==2433) & year<=83
replace smtr=.025 if ys<=1420 & (psu==1433 | psu==2433) & year>=84
replace smtr=.03 if ys>1420 & ys<=2830 & (psu==1433 | psu==2433) & year>=84
replace sbase=35.5 if ys>1420 & ys<=2830 & (psu==1433 | psu==2433) & year>=84
replace slb=1420 if ys>1420 & ys<=2830 & (psu==1433 | psu==2433) & year>=84
replace smtr=.035 if ys>2830 & ys<=4250 & (psu==1433 | psu==2433) & year>=84
replace sbase=77.8 if ys>2830 & ys<=4250 & (psu==1433 | psu==2433) & year>=84
replace slb=2830 if ys>2830 & ys<=4250 & (psu==1433 | psu==2433) & year>=84
replace smtr=.04 if ys>4250 & ys<=5660 & (psu==1433 | psu==2433) & year>=84
replace sbase=127.5 if ys>4250 & ys<=5660 & (psu==1433 | psu==2433) & year>=84
replace slb=4250 if ys>4250 & ys<=5660 & (psu==1433 | psu==2433) & year>=84
replace smtr=.045 if ys>5660 & ys<=7080 & (psu==1433 | psu==2433) & year>=84
replace sbase=183.9 if ys>5660 & ys<=7080 & (psu==1433 | psu==2433) & year>=84
replace slb=5660 if ys>5660 & ys<=7080 & (psu==1433 | psu==2433) & year>=84
replace smtr=.05 if ys>7080 & ys<=8490 & (psu==1433 | psu==2433) & year>=84
replace sbase=247.8 if ys>7080 & ys<=8490 & (psu==1433 | psu==2433) & year>=84

```

```

replace slb=7080      if ys>7080 & ys<=8490 & (psu==1433 | psu==2433) & year>=84
replace smtr=.055    if ys>8490 & ys<=9910 & (psu==1433 | psu==2433) & year>=84
replace sbase=318.3  if ys>8490 & ys<=9910 & (psu==1433 | psu==2433) & year>=84
replace slb=8490     if ys>8490 & ys<=9910 & (psu==1433 | psu==2433) & year>=84
replace smtr=.06     if ys>9910 & ys<=11320 & (psu==1433 | psu==2433) & year>=84
replace sbase=396.4  if ys>9910 & ys<=11320 & (psu==1433 | psu==2433) & year>=84
replace slb=9910     if ys>9910 & ys<=11320 & (psu==1433 | psu==2433) & year>=84
replace smtr=.065    if ys>11320 & ys<=12740 & (psu==1433 | psu==2433) & year>=84
replace sbase=481    if ys>11320 & ys<=12740 & (psu==1433 | psu==2433) & year>=84
replace slb=11320    if ys>11320 & ys<=12740 & (psu==1433 | psu==2433) & year>=84
replace smtr=.075    if ys>12740 & ys<=14150 & (psu==1433 | psu==2433) & year>=84
replace sbase=573.3  if ys>12740 & ys<=14150 & (psu==1433 | psu==2433) & year>=84
replace slb=12740    if ys>12740 & ys<=14150 & (psu==1433 | psu==2433) & year>=84
replace smtr=.08     if ys>14150 & (psu==1433 | psu==2433) & year>=84
replace sbase=679.05 if ys>14150 & (psu==1433 | psu==2433) & year>=84
replace slb=14150    if ys>14150 & (psu==1433 | psu==2433) & year>=84
replace staxpd=sbase+(ys-slb)*smtr if (psu==1433 | psu==2433)

```

* Georgia: Person exemption is 1500 and for dependents is 700 in world almanac (tax foundation data)
* but dependent deduction is same as person exemption in statistical abstract based on ACIR data.
* Will use the ACIR data.

```

replace sstded=(earnm+earnw)*.15 if psu==1319
replace ys=earnm+earnw-(1500*fam_size)-3000 if sstded<=3000 & psu==1319
replace ys=earnm+earnw-(1500*fam_size)-sstded if sstded>3000 & psu==1319
replace smtr=0       if ys<=0 & psu==1319
replace smtr=.01     if ys>0 & ys<=1000 & psu==1319
replace smtr=.02     if ys>1000 & ys<=3000 & psu==1319
replace sbase=10     if ys>1000 & ys<=3000 & psu==1319
replace slb=1000     if ys>1000 & ys<=3000 & psu==1319
replace smtr=.03     if ys>3000 & ys<=5000 & psu==1319
replace sbase=50     if ys>3000 & ys<=5000 & psu==1319
replace slb=3000     if ys>3000 & ys<=5000 & psu==1319
replace smtr=.04     if ys>5000 & ys<=7000 & psu==1319
replace sbase=110    if ys>5000 & ys<=7000 & psu==1319
replace slb=5000     if ys>5000 & ys<=7000 & psu==1319
replace smtr=.05     if ys>7000 & ys<=10000 & psu==1319
replace sbase=190    if ys>7000 & ys<=10000 & psu==1319
replace slb=7000     if ys>7000 & ys<=10000 & psu==1319
replace smtr=.06     if ys>10000 & psu==1319
replace sbase=340    if ys>10000 & psu==1319
replace slb=10000    if ys>10000 & psu==1319
replace staxpd=sbase+(ys-slb)*smtr if psu==1319

```

*Hawaii - MFJ rates shown below.

```

replace stexper=1000 if psu==1426 & (year==82 | year==83 | year==84)
replace stexper=1040 if psu==1426 & year==85
replace ys=earnm+earnw-stexper*fam_size-1000 if psu==1426
replace smtr=0       if ys<=1000 & psu==1426
replace sbase=0      if ys<=1000 & psu==1426
replace smtr=.0225   if ys>1000 & ys<=2000 & psu==1426
replace sbase=0      if ys>1000 & ys<=2000 & psu==1426
replace slb=1000     if ys>1000 & ys<=2000 & psu==1426
replace smtr=.0325   if ys>2000 & ys<=3000 & psu==1426
replace sbase=22.5   if ys>2000 & ys<=3000 & psu==1426
replace slb=2000     if ys>2000 & ys<=3000 & psu==1426
replace smtr=.045    if ys>3000 & ys<=4000 & psu==1426
replace sbase=55     if ys>3000 & ys<=4000 & psu==1426
replace slb=3000     if ys>3000 & ys<=4000 & psu==1426
replace smtr=.05     if ys>4000 & ys<=5000 & psu==1426
replace sbase=100    if ys>4000 & ys<=5000 & psu==1426
replace slb=4000     if ys>4000 & ys<=5000 & psu==1426
replace smtr=.065    if ys>5000 & ys<=7000 & psu==1426
replace sbase=150    if ys>5000 & ys<=7000 & psu==1426

```

```

replace slb=5000 if ys>5000 & ys<=7000 & psu==1426
replace smtr=.075 if ys>7000 & ys<=11000 & psu==1426
replace sbase=280 if ys>7000 & ys<=11000 & psu==1426
replace slb=7000 if ys>7000 & ys<=11000 & psu==1426
replace smtr=.085 if ys>11000 & ys<=21000 & psu==1426
replace sbase=580 if ys>11000 & ys<=21000 & psu==1426
replace slb=11000 if ys>11000 & ys<=21000 & psu==1426
replace smtr=.095 if ys>21000 & ys<=29000 & psu==1426
replace sbase=1430 if ys>21000 & ys<=29000 & psu==1426
replace slb=21000 if ys>21000 & ys<=29000 & psu==1426
replace smtr=.10 if ys>29000 & ys<=41000 & psu==1426
replace sbase=2190 if ys>29000 & ys<=41000 & psu==1426
replace slb=29000 if ys>29000 & ys<=41000 & psu==1426
replace smtr=.105 if ys>41000 & ys<=61000 & psu==1426
replace sbase=3390 if ys>41000 & ys<=61000 & psu==1426
replace slb=41000 if ys>41000 & ys<=61000 & psu==1426
replace smtr=.11 if ys>61000 & psu==1426
replace sbase=5490 if ys>61000 & psu==1426
replace slb=61000 if ys>61000 & psu==1426
replace staxpd=sbase+(ys-slb)*smtr if psu==1426

```

*Washington, D.C.

```

replace stexper=750 if psu==1315 & (year==82 | year==83)
replace stexper=1040 if psu==1315 & year==84
replace stexper=1080 if psu==1315 & year==85
replace sstded=(earnm+earnw)*.10 if psu==1315
replace ys=earnm+earnw-stexper*fam_size-sstded if sstded<1000 & psu==1315 & year<=84
replace ys=earnm+earnw-stexper*fam_size-1000 if (sstded>=1000 & psu==1315 & year<=84) | (year==85 & psu==1315)

```

*tax rates below are for married filing jointly so multiply ys by 2 and divide taxes by 2 in end

```

replace smtr=.02 if ys<=1000 & psu==1315
replace smtr=.03 if ys>1000 & ys<=2000 & psu==1315
replace sbase=20 if ys>1000 & ys<=2000 & psu==1315
replace slb=1000 if ys>1000 & ys<=2000 & psu==1315
replace smtr=.04 if ys>2000 & ys<=3000 & psu==1315
replace sbase=50 if ys>2000 & ys<=3000 & psu==1315
replace slb=2000 if ys>2000 & ys<=3000 & psu==1315
replace smtr=.05 if ys>3000 & ys<=4000 & psu==1315
replace sbase=90 if ys>3000 & ys<=4000 & psu==1315
replace slb=3000 if ys>3000 & ys<=4000 & psu==1315
replace smtr=.06 if ys>4000 & ys<=5000 & psu==1315
replace sbase=140 if ys>4000 & ys<=5000 & psu==1315
replace slb=4000 if ys>4000 & ys<=5000 & psu==1315
replace smtr=.07 if ys>5000 & ys<=10000 & psu==1315
replace sbase=200 if ys>5000 & ys<=10000 & psu==1315
replace slb=5000 if ys>5000 & ys<=10000 & psu==1315
replace smtr=.08 if ys>10000 & ys<=13000 & psu==1315
replace sbase=550 if ys>10000 & ys<=13000 & psu==1315
replace slb=10000 if ys>10000 & ys<=13000 & psu==1315
replace smtr=.09 if ys>13000 & ys<=17000 & psu==1315
replace sbase=790 if ys>13000 & ys<=17000 & psu==1315
replace slb=13000 if ys>13000 & ys<=17000 & psu==1315
replace smtr=.10 if ys>17000 & ys<=25000 & psu==1315
replace sbase=1150 if ys>17000 & ys<=25000 & psu==1315
replace slb=17000 if ys>17000 & ys<=25000 & psu==1315
replace smtr=.11 if ys>25000 & psu==1315
replace sbase=1950 if ys>25000 & psu==1315
replace slb=25000 if ys>25000 & psu==1315
replace staxpd=sbase+((ys-slb)*smtr) - (stcrper*fam_size) if psu==1315

```

*Illinois - personal exemption is 1000.

```

replace smtr=.03 if psu==1207 & year<=83
replace smtr=.025 if psu==1207 & year>=84

```

replace staxpd=(earnm+earnw-fam_size*1000)*smtr if psu==1207

* Maryland - (psu 1317 is Baltimore) Personal exemption is \$800.
* Brackets are for single people.

```
replace sstded=(earnm+earnw)*.13 if psu==1317
replace ys=earnm+earnw-sstded-800*fam_size if sstded<=3000 & psu==1317
replace ys=earnm+earnw-3000-800*fam_size if sstded>3000 & psu==1317
*replace ys=ys/2 if psu==1317
replace smtr=.02 if ys<=1000 & psu==1317
replace smtr=.03 if ys>1000 & ys<=2000 & psu==1317
replace sbase=20 if ys>1000 & ys<=2000 & psu==1317
replace slb=1000 if ys>1000 & ys<=2000 & psu==1317
replace smtr=.04 if ys>2000 & ys<=3000 & psu==1317
replace sbase=50 if ys>2000 & ys<=3000 & psu==1317
replace slb=2000 if ys>2000 & ys<=3000 & psu==1317
replace smtr=.05 if ys>3000 & psu==1317
replace sbase=90 if ys>3000 & psu==1317
replace slb=3000 if ys>3000 & psu==1317
*replace staxpd=(sbase+(ys-slb)*smtr)*2 if psu==1317
replace staxpd=sbase+(ys-slb)*smtr if psu==1317
```

*Massachusetts

```
replace ys= earnm+earnw-4400-(fam_size-2)*700 if psu==1103
replace smtr=.05375 if psu==1103
replace staxpd=ys*smtr if psu==1103
```

*Michigan. State personal exemption is 1500.

```
replace ys= earnm+earnw-1500*fam_size if psu==1208
replace smtr=.0635 if year<=83 & psu==1208
replace smtr=.061 if year==84 & psu==1208
replace smtr=.0535 if year==85 & psu==1208
replace staxpd=ys*smtr if psu==1208
```

*Minnesota: Federal taxes are deductible

```
replace stcrper=67 if (year==82| year==83) & psu==1211
replace stcrper=70 if (year==84| year==85) & psu==1211
```

```
replace sstded=(earnm+earnw)*.10 if psu==1211
replace ys=earnm+earnw-fedtxpd-sstded if sstded<=2250 & year<=83 & psu==1211
replace ys=earnm+earnw-fedtxpd-2250 if sstded>2250 & year<=83 & psu==1211
replace ys=earnm+earnw-fedtxpd-sstded if sstded<=2268 & year==84 & psu==1211
replace ys=earnm+earnw-fedtxpd-2268 if sstded>2268 & year==84 & psu==1211
replace ys=earnm+earnw-fedtxpd-sstded if sstded<=2400 & year==85 & psu==1211
replace ys=earnm+earnw-fedtxpd-2268 if sstded>2400 & year==85 & psu==1211
```

```
replace smtr=.016 if ys<=667 & year==82 & psu==1211
replace smtr=.022 if ys>667 & ys<=1334 & year==82 & psu==1211
replace sbase=10.67 if ys>667 & ys<=1334 & year==82 & psu==1211
replace slb=667 if ys>667 & ys<=1334 & year==82 & psu==1211
replace smtr=.035 if ys>1334 & ys<=2666 & year==82 & psu==1211
replace sbase=25.35 if ys>1334 & ys<=2666 & year==82 & psu==1211
replace slb=1334 if ys>1334 & ys<=2666 & year==82 & psu==1211
replace smtr=.058 if ys>2666 & ys<=3998 & year==82 & psu==1211
replace sbase=71.97 if ys>2666 & ys<=3998 & year==82 & psu==1211
replace slb=2666 if ys>2666 & ys<=3998 & year==82 & psu==1211
replace smtr=.073 if ys>3998 & ys<=5330 & year==82 & psu==1211
replace sbase=149.22 if ys>3998 & ys<=5330 & year==82 & psu==1211
replace slb=3998 if ys>3998 & ys<=5330 & year==82 & psu==1211
replace smtr=.088 if ys>5330 & ys<=6662 & year==82 & psu==1211
replace sbase=246.46 if ys>5330 & ys<=6662 & year==82 & psu==1211
replace slb=5330 if ys>5330 & ys<=6662 & year==82 & psu==1211
replace smtr=.102 if ys>6662 & ys<=9326 & year==82 & psu==1211
replace sbase=363.67 if ys>6662 & ys<=9326 & year==82 & psu==1211
```

```
replace slb=6662 if ys>6662 & ys<=9326 & year==82 & psu==1211
replace smtr=.115 if ys>9326 & ys<=11990 & year==82 & psu==1211
replace sbase=635.4 if ys>9326 & ys<=11990 & year==82 & psu==1211
replace slb=9326 if ys>9326 & ys<=11990 & year==82 & psu==1211
replace smtr=.128 if ys>11990 & ys<=16652 & year==82 & psu==1211
replace sbase=941.76 if ys>11990 & ys<=16652 & year==82 & psu==1211
replace slb=11990 if ys>11990 & ys<=16652 & year==82 & psu==1211
replace smtr=.14 if ys>16652 & ys<=26644 & year==82 & psu==1211
replace sbase=1538.5 if ys>16652 & ys<=26644 & year==82 & psu==1211
replace slb=16652 if ys>16652 & ys<=26644 & year==82 & psu==1211
replace smtr=.15 if ys>26644 & ys<=36632 & year==82 & psu==1211
replace sbase=2937.38 if ys>26644 & ys<=36632 & year==82 & psu==1211
replace slb=26644 if ys>26644 & ys<=36632 & year==82 & psu==1211
replace smtr=.16 if ys>36632 & year==82 & psu==1211
replace sbase=4435.58 if ys>36632 & year==82 & psu==1211
replace slb=36632 if ys>36632 & year==82 & psu==1211
```

```
replace smtr=.016 if ys<=672 & year==83 & psu==1211
replace sbase=0 if ys<=672 & year==83 & psu==1211
replace slb=0 if ys<=672 & year==83 & psu==1211
replace smtr=.022 if ys>672 & ys<=1345 & year==83 & psu==1211
replace sbase=10.75 if ys>672 & ys<=1345 & year==83 & psu==1211
replace slb=672 if ys>672 & ys<=1345 & year==83 & psu==1211
replace smtr=.035 if ys>1345 & ys<=2687 & year==83 & psu==1211
replace sbase=25.56 if ys>1345 & ys<=2687 & year==83 & psu==1211
replace slb=1345 if ys>1345 & ys<=2687 & year==83 & psu==1211
replace smtr=.058 if ys>2687 & ys<=4030 & year==83 & psu==1211
replace sbase=72.53 if ys>2687 & ys<=4030 & year==83 & psu==1211
replace slb=2687 if ys>2687 & ys<=4030 & year==83 & psu==1211
replace smtr=.073 if ys>4030 & ys<=5373 & year==83 & psu==1211
replace sbase=150.42 if ys>4030 & ys<=5373 & year==83 & psu==1211
replace slb=4030 if ys>4030 & ys<=5373 & year==83 & psu==1211
replace smtr=.088 if ys>5373 & ys<=6716 & year==83 & psu==1211
replace sbase=248.46 if ys>5373 & ys<=6716 & year==83 & psu==1211
replace slb=5373 if ys>5373 & ys<=6716 & year==83 & psu==1211
replace smtr=.102 if ys>6716 & ys<=9401 & year==83 & psu==1211
replace sbase=366.65 if ys>6716 & ys<=9401 & year==83 & psu==1211
replace slb=6716 if ys>6716 & ys<=9401 & year==83 & psu==1211
replace smtr=.115 if ys>9401 & ys<=12068 & year==83 & psu==1211
replace sbase=640.52 if ys>9401 & ys<=12068 & year==83 & psu==1211
replace slb=9401 if ys>9401 & ys<=12068 & year==83 & psu==1211
replace smtr=.128 if ys>12068 & ys<=16785 & year==83 & psu==1211
replace sbase=947.22 if ys>12068 & ys<=16785 & year==83 & psu==1211
replace slb=12068 if ys>12068 & ys<=16785 & year==83 & psu==1211
replace smtr=.14 if ys>16785 & ys<=26855 & year==83 & psu==1211
replace sbase=1551 if ys>16785 & ys<=26855 & year==83 & psu==1211
replace slb=16785 if ys>16785 & ys<=26855 & year==83 & psu==1211
replace smtr=.15 if ys>26855 & ys<=36925 & year==83 & psu==1211
replace sbase=2960.8 if ys>26855 & ys<=36925 & year==83 & psu==1211
replace slb=26855 if ys>26855 & ys<=36925 & year==83 & psu==1211
replace smtr=.16 if ys>36925 & year==83 & psu==1211
replace sbase=4471.3 if ys>36925 & year==83 & psu==1211
replace slb=36925 if ys>36925 & year==83 & psu==1211
```

```
replace smtr=.016 if ys<=690 & year==84 & psu==1211
replace sbase=0 if ys<=690 & year==84 & psu==1211
replace slb=0 if ys<=690 & year==84 & psu==1211
replace smtr=.022 if ys>690 & ys<=1380 & year==84 & psu==1211
replace sbase=11.04 if ys>690 & ys<=1380 & year==84 & psu==1211
replace slb=690 if ys>690 & ys<=1380 & year==84 & psu==1211
replace smtr=.035 if ys>1380 & ys<=2759 & year==84 & psu==1211
replace sbase=26.22 if ys>1380 & ys<=2759 & year==84 & psu==1211
replace slb=1380 if ys>1380 & ys<=2759 & year==84 & psu==1211
```

```

replace smtr=.058    if ys>2759 & ys<=4138 & year==84 & psu==1211
replace sbase=74.49 if ys>2759 & ys<=4138 & year==84 & psu==1211
replace slb=2759    if ys>2759 & ys<=4138 & year==84 & psu==1211
replace smtr=.073    if ys>4138 & ys<=5517 & year==84 & psu==1211
replace sbase=154.47 if ys>4138 & ys<=5517 & year==84 & psu==1211
replace slb=4138    if ys>4138 & ys<=5517 & year==84 & psu==1211
replace smtr=.088    if ys>5517 & ys<=6896 & year==84 & psu==1211
replace sbase=255.13 if ys>5517 & ys<=6896 & year==84 & psu==1211
replace slb=5517    if ys>5517 & ys<=6896 & year==84 & psu==1211
replace smtr=.102    if ys>6896 & ys<=9653 & year==84 & psu==1211
replace sbase=376.48 if ys>6896 & ys<=9653 & year==84 & psu==1211
replace slb=6896    if ys>6896 & ys<=9653 & year==84 & psu==1211
replace smtr=.115    if ys>9653 & ys<=12410 & year==84 & psu==1211
replace sbase=657.7  if ys>9653 & ys<=12410 & year==84 & psu==1211
replace slb=9653    if ys>9653 & ys<=12410 & year==84 & psu==1211
replace smtr=.128    if ys>12410 & ys<=17236 & year==84 & psu==1211
replace sbase=974.76 if ys>12410 & ys<=17236 & year==84 & psu==1211
replace slb=12410   if ys>12410 & ys<=17236 & year==84 & psu==1211
replace smtr=.14     if ys>17236 & ys<=27578 & year==84 & psu==1211
replace sbase=1592.48 if ys>17236 & ys<=27578 & year==84 & psu==1211
replace slb=17236   if ys>17236 & ys<=27578 & year==84 & psu==1211
replace smtr=.15     if ys>27578 & ys<=36925 & year==84 & psu==1211
replace sbase=3040.36 if ys>27578 & ys<=36925 & year==84 & psu==1211
replace slb=27578   if ys>27578 & ys<=36925 & year==84 & psu==1211
replace smtr=.16     if ys>37920 & year==84 & psu==1211
replace sbase=4591.66 if ys>37920 & year==84 & psu==1211
replace slb=37920   if ys>37920 & year==84 & psu==1211

```

```

replace smtr=.016    if ys<=875 & year==85 & psu==1211
replace sbase=0      if ys<=875 & year==85 & psu==1211
replace slb=0        if ys<=875 & year==85 & psu==1211
replace smtr=.02     if ys>875 & ys<=1750 & year==85 & psu==1211
replace sbase=13.13  if ys>875 & ys<=1750 & year==85 & psu==1211
replace slb=875      if ys>875 & ys<=1750 & year==85 & psu==1211
replace smtr=.029    if ys>1750 & ys<=3500 & year==85 & psu==1211
replace sbase=30.63  if ys>1750 & ys<=3500 & year==85 & psu==1211
replace slb=1750     if ys>1750 & ys<=3500 & year==85 & psu==1211
replace smtr=.048    if ys>3500 & ys<=5375 & year==85 & psu==1211
replace sbase=81.38  if ys>3500 & ys<=5375 & year==85 & psu==1211
replace slb=3500     if ys>3500 & ys<=5375 & year==85 & psu==1211
replace smtr=.059    if ys>5375 & ys<=7000 & year==85 & psu==1211
replace sbase=171.38 if ys>5375 & ys<=7000 & year==85 & psu==1211
replace slb=5375     if ys>5375 & ys<=7000 & year==85 & psu==1211
replace smtr=.061    if ys>7000 & ys<=7125 & year==85 & psu==1211
replace sbase=267.25 if ys>7000 & ys<=7125 & year==85 & psu==1211
replace slb=7000     if ys>7000 & ys<=7125 & year==85 & psu==1211
replace smtr=.072    if ys>7125 & ys<=8875 & year==85 & psu==1211
replace sbase=274.88 if ys>7125 & ys<=8875 & year==85 & psu==1211
replace slb=7125     if ys>7125 & ys<=8875 & year==85 & psu==1211
replace smtr=.083    if ys>8875 & ys<=12375 & year==85 & psu==1211
replace sbase=400.88 if ys>8875 & ys<=12375 & year==85 & psu==1211
replace slb=8875     if ys>8875 & ys<=12375 & year==85 & psu==1211
replace smtr=.093    if ys>12375 & ys<=14000 & year==85 & psu==1211
replace sbase=691.38 if ys>12375 & ys<=14000 & year==85 & psu==1211
replace slb=12375    if ys>12375 & ys<=14000 & year==85 & psu==1211
replace smtr=.1      if ys>14000 & ys<=16000 & year==85 & psu==1211
replace sbase=842.5  if ys>14000 & ys<=16000 & year==85 & psu==1211
replace slb=14000    if ys>14000 & ys<=16000 & year==85 & psu==1211
replace smtr=.11     if ys>16000 & ys<=21500 & year==85 & psu==1211
replace sbase=1042.5 if ys>16000 & ys<=21500 & year==85 & psu==1211
replace slb=16000    if ys>16000 & ys<=21500 & year==85 & psu==1211
replace smtr=.113    if ys>21500 & ys<=22125 & year==85 & psu==1211
replace sbase=1647.5 if ys>21500 & ys<=22125 & year==85 & psu==1211

```

```

replace slb=21500      if ys>21500 & ys<=22125 & year==85 & psu==1211
replace smtr=.123     if ys>22125 & ys<=25500 & year==85 & psu==1211
replace sbase=1718.13 if ys>22125 & ys<=25500 & year==85 & psu==1211
replace slb=22125     if ys>22125 & ys<=25500 & year==85 & psu==1211
replace smtr=.126     if ys>25500 & ys<=28500 & year==85 & psu==1211
replace sbase=2133.25 if ys>25500 & ys<=28500 & year==85 & psu==1211
replace slb=21500     if ys>25500 & ys<=28500 & year==85 & psu==1211
replace smtr=.137     if ys>28500 & ys<=31750 & year==85 & psu==1211
replace sbase=2511.25 if ys>28500 & ys<=31750 & year==85 & psu==1211
replace slb=28500     if ys>28500 & ys<=31750 & year==85 & psu==1211
replace smtr=.14      if ys>31750      & year==85 & psu==1211
replace sbase=2956.50 if ys>31750      & year==85 & psu==1211
replace slb=37920     if ys>31750      & year==85 & psu==1211
replace staxpd= sbase+(ys-slb)*smtr-stcrper*fam_size if psu==1211

```

*Missouri: psu 1209 is St. Louis and psu 1214 is Kansas City
 *Federal taxes are deductible. According to Statistical Abstract, tax brackets married=single

```

replace stexper=1200 if (psu==1209 | psu==1214)
replace stexdep=400  if (psu==1209 | psu==1214)
replace sstded=3400  if year<=84 & (psu==1209 | psu==1214)
replace sstded=3540  if year==85 & (psu==1209 | psu==1214)
replace ys=earnm+earnw-stexper*2-stexdep*(fam_size-2)-sstded-fedtxpd if (psu==1209 | psu==1214)
replace smtr=.015    if ys<=1000 & (psu==1209 | psu==1214)
replace smtr=.02     if ys>1000 & ys<=2000 & (psu==1209 | psu==1214)
replace sbase=15     if ys>1000 & ys<=2000 & (psu==1209 | psu==1214)
replace slb=1000     if ys>1000 & ys<=2000 & (psu==1209 | psu==1214)
replace smtr=.025    if ys>2000 & ys<=3000 & (psu==1209 | psu==1214)
replace sbase=35     if ys>2000 & ys<=3000 & (psu==1209 | psu==1214)
replace slb=2000     if ys>2000 & ys<=3000 & (psu==1209 | psu==1214)
replace smtr=.03     if ys>3000 & ys<=4000 & (psu==1209 | psu==1214)
replace sbase=60     if ys>3000 & ys<=4000 & (psu==1209 | psu==1214)
replace slb=3000     if ys>3000 & ys<=4000 & (psu==1209 | psu==1214)
replace smtr=.035    if ys>4000 & ys<=5000 & (psu==1209 | psu==1214)
replace sbase=90     if ys>4000 & ys<=5000 & (psu==1209 | psu==1214)
replace slb=4000     if ys>4000 & ys<=5000 & (psu==1209 | psu==1214)
replace smtr=.04     if ys>5000 & ys<=6000 & (psu==1209 | psu==1214)
replace sbase=125    if ys>5000 & ys<=6000 & (psu==1209 | psu==1214)
replace slb=5000     if ys>5000 & ys<=6000 & (psu==1209 | psu==1214)
replace smtr=.045    if ys>6000 & ys<=7000 & (psu==1209 | psu==1214)
replace sbase=165    if ys>6000 & ys<=7000 & (psu==1209 | psu==1214)
replace slb=6000     if ys>6000 & ys<=7000 & (psu==1209 | psu==1214)
replace smtr=.05     if ys>7000 & ys<=8000 & (psu==1209 | psu==1214)
replace sbase=210    if ys>7000 & ys<=8000 & (psu==1209 | psu==1214)
replace slb=7000     if ys>7000 & ys<=8000 & (psu==1209 | psu==1214)
replace smtr=.055    if ys>8000 & ys<=9000 & (psu==1209 | psu==1214)
replace sbase=260    if ys>8000 & ys<=9000 & (psu==1209 | psu==1214)
replace slb=8000     if ys>8000 & ys<=9000 & (psu==1209 | psu==1214)
replace smtr=.06     if ys>9000 & (psu==1209 | psu==1214)
replace sbase=315    if ys>9000 & (psu==1209 | psu==1214)
replace slb=9000     if ys>9000 & (psu==1209 | psu==1214)
replace staxpd=sbase+(ys-slb)*smtr if (psu==1209 | psu==1214)

```

*New York - Statistical abstract says same brackets for all.

```

replace stexper=800 if (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year<=83
replace stexper=850 if (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year>=84
replace sstded=(earnm+earnw)*.17 if (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace ys=earnm+earnw-(stexper*fam_size)-sstded if sstded<2500 & (psu==1101 | psu==1110 | psu==1111 |
psu==1105) & (year<=84)
replace ys=earnm+earnw-(stexper*fam_size)-2500 if sstded>2500 & (psu==1101 | psu==1110 | psu==1111 |
psu==1105) & (year<=84)
replace ys=earnm+earnw-(stexper*fam_size)-2750 if (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year==85
replace smtr=.02     if ys<=1000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.03     if ys>1000 & ys<=3000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)

```

```

replace sbase=20 if ys>1000 & ys<=3000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=1000 if ys>1000 & ys<=3000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.04 if ys>3000 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=80 if ys>3000 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=3000 if ys>3000 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.05 if ys>5000 & ys<=7000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=160 if ys>5000 & ys<=7000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=5000 if ys>5000 & ys<=7000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.06 if ys>7000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=260 if ys>7000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=7000 if ys>7000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.07 if ys>9000 & ys<=11000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=380 if ys>9000 & ys<=11000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=9000 if ys>9000 & ys<=11000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.08 if ys>11000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=520 if ys>11000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=11000 if ys>11000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.09 if ys>13000 & ys<=15000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=680 if ys>13000 & ys<=15000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=13000 if ys>13000 & ys<=15000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.10 if ys>15000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=860 if ys>15000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=15000 if ys>15000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.11 if ys>17000 & ys<=19000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=1060 if ys>17000 & ys<=19000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=17000 if ys>17000 & ys<=19000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.12 if ys>19000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=1280 if ys>19000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=19000 if ys>19000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.13 if ys>21000 & ys<=23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=1520 if ys>21000 & ys<=23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=21000 if ys>21000 & ys<=23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.14 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year<85
replace smtr=.1375 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year==85
replace sbase=1780 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=23000 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace staxpd=sbase+(ys-slb)*smtr if (psu==1101 | psu==1110 | psu==1111 | psu==1105)

```

*Ohio - No standard deduction. World Almanac: stexper=650 all years ;

*Statistical Abstract: stexper=650 in 82 but 1000>82.

```

replace stexper=650 if (psu==1210 | psu==1213)
replace ys=earnm+earnw-(stexper*fam_size) if (psu==1210 | psu==1213)
replace smtr=.00625 if ys<=5000 & (psu==1210 | psu==1213)
replace smtr=.0125 if ys>5000 & ys<=10000 & year==82 & (psu==1210 | psu==1213)
replace sbase=31.25 if ys>5000 & ys<=10000 & year==82 & (psu==1210 | psu==1213)
replace slb=5000 if ys>5000 & ys<=10000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.025 if ys>10000 & ys<=15000 & year==82 & (psu==1210 | psu==1213)
replace sbase=93.75 if ys>10000 & ys<=15000 & year==82 & (psu==1210 | psu==1213)
replace slb=10000 if ys>10000 & ys<=15000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.03125 if ys>15000 & ys<=20000 & year==82 & (psu==1210 | psu==1213)
replace sbase=218.75 if ys>15000 & ys<=20000 & year==82 & (psu==1210 | psu==1213)
replace slb=15000 if ys>15000 & ys<=20000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.0375 if ys>20000 & ys<=40000 & year==82 & (psu==1210 | psu==1213)
replace sbase=375 if ys>20000 & ys<=40000 & year==82 & (psu==1210 | psu==1213)
replace slb=20000 if ys>20000 & ys<=40000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.04375 if ys>40000 & ys<=80000 & year==82 & (psu==1210 | psu==1213)
replace sbase=1125 if ys>40000 & ys<=80000 & year==82 & (psu==1210 | psu==1213)
replace slb=40000 if ys>40000 & ys<=80000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.05 if ys>80000 & ys<=100000 & year==82 & (psu==1210 | psu==1213)
replace sbase=2875 if ys>80000 & ys<=100000 & year==82 & (psu==1210 | psu==1213)
replace slb=80000 if ys>80000 & ys<=100000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.0625 if ys>100000 & year==82 & (psu==1210 | psu==1213)
replace sbase=3875 if ys>100000 & year==82 & (psu==1210 | psu==1213)

```



```

replace slb=80000 if ys>80000 & ys<=100000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.09025 if ys>100000 & year==85 & (psu==1210 | psu==1213)
replace sbase=5595.75 if ys>100000 & year==85 & (psu==1210 | psu==1213)
replace slb=100000 if ys>100000 & year==85 & (psu==1210 | psu==1213)
replace staxpd=sbase+(ys-slb)*smtr if (psu==1210 | psu==1213)

```

```

*Pennsylvania- Philly (1102) Pittsburgh (1104)
replace smtr=.022 if (psu==1102 | psu==1104) & year==82
replace smtr=.0245 if (psu==1102 | psu==1104) & year==83
replace smtr=.024 if (psu==1102 | psu==1104) & year==84
replace smtr=.0235 if (psu==1102 | psu==1104) & year==85
replace staxpd=(earnm+earnw)*smtr if (psu==1102 | psu==1104)

```

```

*Wisconsin
replace stcrper=20 if psu==1212
replace sstded=3400 if psu==1212
replace ys=earnm+earnw-sstded if psu==1212
replace smtr=.034 if ys<=3900 & psu==1212
replace smtr=.052 if ys>3900 & ys<=7700 & psu==1212
replace sbase=132.6 if ys>3900 & ys<=7700 & psu==1212
replace slb=3900 if ys>3900 & ys<=7700 & psu==1212
replace smtr=.07 if ys>7700 & ys<=11700 & psu==1212
replace sbase=330.2 if ys>7700 & ys<=11700 & psu==1212
replace slb=7700 if ys>7700 & ys<=11700 & psu==1212
replace smtr=.082 if ys>11700 & ys<=15500 & psu==1212
replace sbase=611 if ys>11700 & ys<=15500 & psu==1212
replace slb=11700 if ys>11700 & ys<=15500 & psu==1212
replace smtr=.087 if ys>15500 & ys<=19400 & psu==1212
replace sbase=922.6 if ys>15500 & ys<=19400 & psu==1212
replace slb=15500 if ys>15500 & ys<=19400 & psu==1212
replace smtr=.091 if ys>19400 & ys<=25800 & psu==1212
replace sbase=1261.9 if ys>19400 & ys<=25800 & psu==1212
replace slb=19400 if ys>19400 & ys<=25800 & psu==1212
replace smtr=.095 if ys>25800 & ys<=51600 & psu==1212
replace sbase=1844.3 if ys>25800 & ys<=51600 & psu==1212
replace slb=25800 if ys>25800 & ys<=51600 & psu==1212
replace smtr=.1 if ys>51600 & psu==1212
replace sbase=4295.3 if ys>51600 & psu==1212
replace slb=51600 if ys>51600 & psu==1212
replace staxpd=sbase+(ys-slb)*smtr-stcrper*fam_size if psu==1212

```

```

replace staxpd=0 if staxpd<0
replace smtr=0 if staxpd==0

```

```

*City tax rates
gen cmtr=0
label variable cmtr "city marginal tax rate"
gen ctaxpd=0
label variable ctaxpd "city taxes paid"
gen cb=0
gen clb=0

```

```

replace cmtr=.01 if (psu==1214 | psu==1209)
replace cmtr=.02 if (psu==1213 | psu==1210)
replace cmtr=.02125 if psu==1104 & year<=84
replace cmtr=.04 if psu==1104 & year==85
replace cmtr=.043125 if psu==1102
replace ctaxpd=(earnm+earnw)*cmtr if (psu==1214 | psu==1209 | psu==1213 | psu==1210 | psu==1104 | psu==1102)

```

```

replace ctaxpd=ys*.03 if psu==1208
replace cmtr=.03 if psu==1208

```

```

replace ctaxpd=(staxpd/2) if psu==1317

```

```

replace cmtr=.5*smtr if psu==1317

replace cmtr=.009 if ys<=2500 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.013 if ys>2500 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=22.5 if ys>2500 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=2500 if ys>2500 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.017 if ys>5000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=55 if ys>5000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=5000 if ys>5000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.022 if ys>9000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=123 if ys>9000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=9000 if ys>9000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.026 if ys>13000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=211 if ys>13000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=13000 if ys>13000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.03 if ys>17000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=315 if ys>17000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=17000 if ys>17000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.035 if ys>21000 & ys<=25000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=435 if ys>21000 & ys<=25000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=21000 if ys>21000 & ys<=25000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.039 if ys>25000 & ys<=60000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=575 if ys>25000 & ys<=60000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=25000 if ys>25000 & ys<=60000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.043 if ys>60000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=1940 if ys>60000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=60000 if ys>60000 & (psu==1101 | psu==1110 | psu==1111)
replace ctaxpd=cb+(ys-clb)*cmtr if (psu==1101 | psu==1110 | psu==1111)

```

```

gen taxbill=fedtxpd+staxpd+ctaxpd+ficatxpdm+ficatxpdw
gen mtr_m=fedmtr+smtr+cmtr+ficamtrm
gen mtr_w=fedmtr+smtr+cmtr+ficamtrw

```

Stata Program for Single People:

```

gen pd_fical=.
label variable pd_fical "Fica taxes paid: earner 1"
gen m_fical=0
label variable m_fical "Marginal Fica tax rate: earner 1"
replace m_fical=.067 if year ==82 & earnl>0 & earnl<=32400
replace pd_fical=.067*earnl if year==82 & earnl<=32400
replace pd_fical=.067*32400 if year==82 & earnl>32400
replace m_fical=.067 if year ==83 & earnl>0 & earnl<=35700
replace pd_fical=.067*earnl if year==83 & earnl<=35700
replace pd_fical=.067*35700 if year==83 & earnl>35700
replace m_fical=.067 if year ==84 & earnl>0 & earnl<=37800
replace pd_fical=.067*earnl if year==84 & earnl<=37800
replace pd_fical=.067*37800 if year==84 & earnl>37800
replace m_fical=.0705 if year ==85 & earnl>0 & earnl<=39600
replace pd_fical=.0705*earnl if year==85 & earnl<=39600
replace pd_fical=.0705*39600 if year==85 & earnl> 39600

```

*Computing federal taxable income. In 82, 83, and 84, the \$3300= \$1000 personal exemption+\$2300 standard deduction for single person.

*in 1985, \$3430= \$1040 personal exemption+\$2390 standard deduction for single person.

```

gen yf= earnl-3300 if year<=84
replace yf= earnl-3430 if year==85
label variable yf "Federal taxable income"
*computing federal marginal tax rate - fedmtr
*computing federal taxable base amount - fedb
*computing the lower bound of a Federal tax bracket- fedlb
gen fedmtr = .

```

```

gen fbase=.
gen fedlb=.
label variable fedmtr "Federal marginal tax rate"
label variable fbase "Fed taxes at lower bound"
label variable fedlb "Federal lower bound of bracket"
replace fedmtr = 0 if year==85 & yf<=2390
replace fbase = 0 if year==85 & yf<=2390
replace fedlb = 0 if year==85 & yf<=2390
replace fedmtr =.11 if year==85 & yf> 2390 & yf<=3540
replace fbase = 0 if year==85 & yf> 2390 & yf<=3540
replace fedlb = 2390 if year==85 & yf> 2390 & yf<=3540
replace fedmtr =.12 if year==85 & yf> 3540 & yf<=4580
replace fbase =126.50 if year==85 & yf> 3540 & yf<=4580
replace fedlb = 3540 if year==85 & yf> 3540 & yf<=4580
replace fedmtr = .14 if year==85 & yf> 4580 & yf<=6760
replace fbase = 251.30 if year==85 & yf> 4580 & yf<=6760
replace fedlb = 4580 if year==85 & yf> 4580 & yf<=6760
replace fedmtr = .15 if year==85 & yf> 6760 & yf<=8850
replace fbase = 556.50 if year==85 & yf> 6760 & yf<=8850
replace fedlb = 6760 if year==85 & yf> 6760 & yf<=8850
replace fedmtr = .16 if year==85 & yf> 8850 & yf<=11240
replace fbase = 870 if year==85 & yf> 8850 & yf<=11240
replace fedlb = 8850 if year==85 & yf> 8850 & yf<=11240
replace fedmtr = .18 if year==85 & yf>11240 & yf<=13430
replace fbase = 1252.40 if year==85 & yf>11240 & yf<=13430
replace fedlb = 11240 if year==85 & yf>11240 & yf<=13430
replace fedmtr = .20 if year==85 & yf>13430 & yf<=15610
replace fbase = 1646.60 if year==85 & yf>13430 & yf<=15610
replace fedlb = 13430 if year==85 & yf>13430 & yf<=15610
replace fedmtr = .23 if year==85 & yf>15610 & yf<=18940
replace fbase = 2082.60 if year==85 & yf>15610 & yf<=18940
replace fedlb = 15610 if year==85 & yf>15610 & yf<=18940
replace fedmtr = .26 if year==85 & yf>18940 & yf<=24460
replace fbase = 2848.50 if year==85 & yf>18940 & yf<=24460
replace fedlb = 18940 if year==85 & yf>18940 & yf<=24460
replace fedmtr = .30 if year==85 & yf> 24460 & yf<= 29970
replace fbase = 4283.70 if year==85 & yf> 24460 & yf<= 29970
replace fedlb = 24460 if year==85 & yf> 24460 & yf<= 29970
replace fedmtr = .34 if year==85 & yf> 29970 & yf<= 35490
replace fbase = 5936.70 if year==85 & yf> 29970 & yf<= 35490
replace fedlb = 29970 if year==85 & yf> 29970 & yf<= 35490
replace fedmtr = .38 if year==85 & yf> 35490 & yf<= 43190
replace fbase = 7813.50 if year==85 & yf> 35490 & yf<= 43190
replace fedlb = 35490 if year==85 & yf> 35490 & yf<= 43190
replace fedmtr = .42 if year==85 & yf> 43190 & yf<= 57550
replace fbase =10739.50 if year==85 & yf> 43190 & yf<= 57550
replace fedlb = 43190 if year==85 & yf> 43190 & yf<= 57550
replace fedmtr = .48 if year==85 & yf> 57550 & yf<= 85130
replace fbase =16770.70 if year==85 & yf> 57550 & yf<= 85130
replace fedlb = 57550 if year==85 & yf> 57550 & yf<= 85130
replace fedmtr = .50 if year==85 & yf> 85130
replace fbase =30009.10 if year==85 & yf> 85130
replace fedlb = 85130 if year==85 & yf> 85130
replace fedmtr = 0 if year==84 & yf<= 2300
replace fbase = 0 if year==84 & yf<= 2300
replace fedlb = 0 if year==84 & yf<= 2300
replace fedmtr = .11 if year==84 & yf> 2300 & yf<= 3400
replace fbase = 0 if year==84 & yf> 2300 & yf<= 3400
replace fedlb = 2300 if year==84 & yf> 2300 & yf<= 3400
replace fedmtr = .12 if year==84 & yf> 3400 & yf<= 4400
replace fbase = 121 if year==84 & yf> 3400 & yf<= 4400
replace fedlb = 3400 if year==84 & yf> 3400 & yf<= 4400
replace fedmtr = .14 if year==84 & yf> 4400 & yf<= 6500

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```
replace fbase = 241 if year==84 & yf> 4400 & yf<= 6500
replace fedlb = 4400 if year==84 & yf> 4400 & yf<= 6500
replace fedmtr = .15 if year==84 & yf> 6500 & yf<= 8500
replace fbase = 535 if year==84 & yf> 6500 & yf<= 8500
replace fedlb = 6500 if year==84 & yf> 6500 & yf<= 8500
replace fedmtr = .16 if year==84 & yf> 8500 & yf<= 10800
replace fbase = 835 if year==84 & yf> 8500 & yf<= 10800
replace fedlb = 8500 if year==84 & yf> 8500 & yf<= 10800
replace fedmtr = .18 if year==84 & yf> 10800 & yf<= 12900
replace fbase = 1203 if year==84 & yf> 10800 & yf<= 12900
replace fedlb = 10800 if year==84 & yf> 10800 & yf<= 12900
replace fedmtr = .20 if year==84 & yf> 12900 & yf<= 15000
replace fbase = 1581 if year==84 & yf> 12900 & yf<= 15000
replace fedlb = 12900 if year==84 & yf> 12900 & yf<= 15000
replace fedmtr = .23 if year==84 & yf> 15000 & yf<= 18200
replace fbase = 2001 if year==84 & yf> 15000 & yf<= 18200
replace fedlb = 15000 if year==84 & yf> 15000 & yf<= 18200
replace fedmtr = .26 if year==84 & yf> 18200 & yf<= 23500
replace fbase = 2737 if year==84 & yf> 18200 & yf<= 23500
replace fedlb = 18200 if year==84 & yf> 18200 & yf<= 23500
replace fedmtr = .30 if year==84 & yf> 23500 & yf<= 28800
replace fbase = 4115 if year==84 & yf> 23500 & yf<= 28800
replace fedlb = 23500 if year==84 & yf> 23500 & yf<= 28800
replace fedmtr = .34 if year==84 & yf> 28800 & yf<= 34100
replace fbase = 5705 if year==84 & yf> 28800 & yf<= 34100
replace fedlb = 28800 if year==84 & yf> 28800 & yf<= 34100
replace fedmtr = .38 if year==84 & yf> 34100 & yf<= 41500
replace fbase = 7507 if year==84 & yf> 34100 & yf<= 41500
replace fedlb = 34100 if year==84 & yf> 34100 & yf<= 41500
replace fedmtr = .42 if year==84 & yf> 41500 & yf<= 55300
replace fbase = 10319 if year==84 & yf> 41500 & yf<= 55300
replace fedlb = 41500 if year==84 & yf> 41500 & yf<= 55300
replace fedmtr = .48 if year==84 & yf> 55300 & yf<= 81800
replace fbase = 16115 if year==84 & yf> 55300 & yf<= 81800
replace fedlb = 55300 if year==84 & yf> 55300 & yf<= 81800
replace fedmtr = .50 if year==84 & yf> 81800
replace fbase = 28835 if year==84 & yf> 81800
replace fedlb = 81800 if year==84 & yf>81800
replace fedmtr = 0 if year==83 & yf<= 2300
replace fbase = 0 if year==83 & yf<= 2300
replace fedlb = 0 if year==83 & yf<= 2300
replace fedmtr = .11 if year==83 & yf> 2300 & yf<= 3400
replace fbase = 0 if year==83 & yf> 2300 & yf<= 3400
replace fedlb = 2300 if year==83 & yf> 2300 & yf<= 3400
replace fedmtr = .13 if year==83 & yf> 3400 & yf<= 4400
replace fbase = 121 if year==83 & yf> 3400 & yf<= 4400
replace fedlb = 3400 if year==83 & yf> 3400 & yf<= 4400
replace fedmtr = .15 if year==83 & yf> 4400 & yf<= 8500
replace fbase = 251 if year==83 & yf> 4400 & yf<= 8500
replace fedlb = 4400 if year==83 & yf> 4400 & yf<= 8500
replace fedmtr = .17 if year==83 & yf> 8500 & yf<= 10800
replace fbase = 866 if year==83 & yf> 8500 & yf<= 10800
replace fedlb = 8500 if year==83 & yf> 8500 & yf<= 10800
replace fedmtr = .19 if year==83 & yf> 10800 & yf<= 12900
replace fbase = 1257 if year==83 & yf> 10800 & yf<= 12900
replace fedlb = 10800 if year==83 & yf> 10800 & yf<= 12900
replace fedmtr = .21 if year==83 & yf> 12900 & yf<= 15000
replace fbase = 1656 if year==83 & yf> 12900 & yf<= 15000
replace fedlb = 12900 if year==83 & yf> 12900 & yf<= 15000
replace fedmtr = .24 if year==83 & yf> 15000 & yf<= 18200
replace fbase = 2097 if year==83 & yf> 15000 & yf<= 18200
replace fedlb = 15000 if year==83 & yf> 15000 & yf<= 18200
replace fedmtr = .28 if year==83 & yf> 18200 & yf<= 23500
```

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replace fbase = 2865 if year==83 & yf> 18200 & yf<= 23500
replace fedlb = 18200 if year==83 & yf> 18200 & yf<= 23500
replace fedmtr = .32 if year==83 & yf> 23500 & yf<= 28800
replace fbase = 4349 if year==83 & yf> 23500 & yf<= 28800
replace fedlb = 23500 if year==83 & yf> 23500 & yf<= 28800
replace fedmtr = .36 if year==83 & yf> 28800 & yf<= 34100
replace fbase = 6045 if year==83 & yf> 28800 & yf<= 34100
replace fedlb = 28800 if year==83 & yf> 28800 & yf<= 34100
replace fedmtr = .40 if year==83 & yf> 34100 & yf<= 41500
replace fbase = 7953 if year==83 & yf> 34100 & yf<= 41500
replace fedlb = 34100 if year==83 & yf> 34100 & yf<= 41500
replace fedmtr = .45 if year==83 & yf> 41500 & yf<= 55300
replace fbase = 10913 if year==83 & yf> 41500 & yf<= 55300
replace fedlb = 41500 if year==83 & yf> 41500 & yf<= 55300
replace fedmtr = .50 if year==83 & yf> 55300
replace fbase = 17123 if year==83 & yf> 55300
replace fedlb = 55300 if year==83 & yf> 55300
replace fedmtr = 0 if year==82 & yf<= 2300
replace fbase = 0 if year==82 & yf<= 2300
replace fedlb = 0 if year==82 & yf<= 2300
replace fedmtr = .12 if year==82 & yf> 2300 & yf<= 3400
replace fbase = 0 if year==82 & yf> 2300 & yf<= 3400
replace fedlb = 2300 if year==82 & yf> 2300 & yf<= 3400
replace fedmtr = .14 if year==82 & yf> 3400 & yf<= 4400
replace fbase = 132 if year==82 & yf> 3400 & yf<= 4400
replace fedlb = 3400 if year==82 & yf> 3400 & yf<= 4400
replace fedmtr = .16 if year==82 & yf> 4400 & yf<= 6500
replace fbase = 272 if year==82 & yf> 4400 & yf<= 6500
replace fedlb = 4400 if year==82 & yf> 4400 & yf<= 6500
replace fedmtr = .17 if year==82 & yf> 6500 & yf<= 8500
replace fbase = 608 if year==82 & yf> 6500 & yf<= 8500
replace fedlb = 6500 if year==82 & yf> 6500 & yf<= 8500
replace fedmtr = .19 if year==82 & yf> 8500 & yf<= 10800
replace fbase = 948 if year==82 & yf> 8500 & yf<= 10800
replace fedlb = 8500 if year==82 & yf> 8500 & yf<= 10800
replace fedmtr = .22 if year==82 & yf> 10800 & yf<= 12900
replace fbase = 1385 if year==82 & yf> 10800 & yf<= 12900
replace fedlb = 10800 if year==82 & yf> 10800 & yf<= 12900
replace fedmtr = .23 if year==82 & yf> 12900 & yf<= 15000
replace fbase = 1847 if year==82 & yf> 12900 & yf<= 15000
replace fedlb = 12900 if year==82 & yf> 12900 & yf<= 15000
replace fedmtr = .27 if year==82 & yf> 15000 & yf<= 18200
replace fbase = 2330 if year==82 & yf> 15000 & yf<= 18200
replace fedlb = 15000 if year==82 & yf> 15000 & yf<= 18200
replace fedmtr = .31 if year==82 & yf>18200 & yf<= 23500
replace fbase = 3194 if year==82 & yf>18200 & yf<= 23500
replace fedlb = 18200 if year==82 & yf>18200 & yf<= 23500
replace fedmtr = .35 if year==82 & yf> 23500 & yf<= 28800
replace fbase = 4837 if year==82 & yf> 23500 & yf<= 28800
replace fedlb = 23500 if year==82 & yf> 23500 & yf<= 28800
replace fedmtr = .40 if year==82 & yf> 28800 & yf<= 34100
replace fbase = 6692 if year==82 & yf> 28800 & yf<= 34100
replace fedlb = 28800 if year==82 & yf> 28800 & yf<= 34100
replace fedmtr = .44 if year==82 & yf> 34100 & yf<= 41500
replace fbase = 8812 if year==82 & yf> 34100 & yf<= 41500
replace fedlb = 34100 if year==82 & yf> 34100 & yf<= 41500
replace fedmtr = .50 if year==82 & yf> 41500
replace fbase = 12068 if year==82 & yf> 41500
replace fedlb = 41500 if year==82 & yf> 41500
gen fedtxpd=0
label variable fedtxpd "Federal Taxes paid"
replace fedtxpd=fbase+(yf-fedlb)*fedmtr

```

```

*State Taxes.
gen stexper=0
label variable stexp "state exemption: individual"
gen stcrper=0
label variable stcrper "state tax credit: individual "
gen sstded=0
label variable sstded "State standard deduction"
gen stexdep=0
label variable stexdep "State exemptions for dependents"
gen ys=0
label variable ys "State taxable income"
gen smtr = 0
gen sbase=0
gen slb=0
label variable smtr "State marginal tax rate"
label variable sbase "State taxes at lower bound"
label variable slb "State lower bound of bracket"
gen staxpd=.
label variable staxpd "state taxes paid"

```

```

*No state taxes: Alaska (1427), Texas (1316, 1318), Washington (1423). DC is 1315.
replace staxpd=0 if (psu==1427 | psu==1316 | psu==1318 | psu==1423)

```

```

*California: psu==1421 or 1422 or 1424
*Federal income taxes are not tax deductible
*Tax credit of $32 in 1981 and the standard deduction is $1400
replace stcrper=35 if (psu==1421| psu==1422| psu==1424) & year==82
replace sstded=1510 if (psu==1421| psu==1422| psu==1424) & (year<=84)
replace stcrper=38 if (psu==1421| psu==1422| psu==1424) & (year==83 |year==84)
replace stcrper=40 if (psu==1421| psu==1422| psu==1424) & year==85
replace sstded=1580 if (psu==1421| psu==1422| psu==1424) & year==85
replace ys=2*(earn1-sstded) if (psu==1421| psu==1422| psu==1424) & year==82
replace ys=2*(earn1-sstded) if (psu==1421| psu==1422| psu==1424) & year==83
replace ys=earn1-sstded if (psu==1421| psu==1422| psu==1424) & year==84
replace ys=earn1-sstded if (psu==1421| psu==1422| psu==1424) & year==85

```

```

*These are married filed jointly rates, so I multiplied earn1-sstded by 2. Will divide by two in end.
replace smtr=0 if ys<=3020 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.01 if ys>3020 & ys<=9200 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=3020 if ys>3020 & ys<=9200 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.02 if ys>9200 & ys<=13800 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=61.8 if ys>9200 & ys<=13800 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=9200 if ys>9200 & ys<=13800 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.03 if ys>13800 & ys<=18400 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=153.8 if ys>13800 & ys<=18400 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=13800 if ys>13800 & ys<=18400 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.04 if ys>18400 & ys<=23100 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=291.8 if ys>18400 & ys<=23100 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=18400 if ys>18400 & ys<=23100 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.05 if ys>23100 & ys<=27740 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=479.8 if ys>23100 & ys<=27740 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=23100 if ys>23100 & ys<=27740 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.06 if ys>27740 & ys<= 32380 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=711.8 if ys>27740 & ys<=32380 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=27740 if ys>27740 & ys<=32380 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.07 if ys>32380 & ys<=36960 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=990.2 if ys>32380 & ys<=36960 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=32380 if ys>32380 & ys<=36960 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.08 if ys>36960 & ys<=41600 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=1310.8 if ys>36960 & ys<=41600 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace slb=36960 if ys>36960 & ys<=41600 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace smtr=.09 if ys>41600 & ys<=46240 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)
replace sbase=1682 if ys>41600 & ys<=46240 & (psu==1421| psu==1422| psu==1424) & (year==82| year==83)

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```

replace slb=41600 if ys>41600 & ys<=46240 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)
replace smtr=.10 if ys>46240 & ys<=50860 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)
replace sbase=2099.6 if ys>46240 & ys<=50860 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)
replace slb=46240 if ys>46240 & ys<=50860 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)
replace smtr=.11 if ys>50860 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)
replace sbase=2561.6 if ys>50860 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)
replace slb=50860 if ys>50860 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==83)

```

*In 84 and 85, rates are for single people!

```

replace smtr=0 if ys<=1580 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.01 if ys>1580 & ys<=4810 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=1580 if ys>1580 & ys<=4810 & (psu==1421 | psu==1422 | psu==1424) & (year==82 | year==85)
replace smtr=.02 if ys>4810 & ys<=7220 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=32.3 if ys>4810 & ys<=7220 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=4810 if ys>4810 & ys<=7220 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.03 if ys>7220 & ys<=9630 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=80.5 if ys>7220 & ys<=9630 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=7220 if ys>7220 & ys<=9630 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.04 if ys>9630 & ys<=12080 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=152.8 if ys>9630 & ys<=12080 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=9630 if ys>9630 & ys<=12080 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.05 if ys>12080 & ys<=14510 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=250.8 if ys>12080 & ys<=14510 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=12080 if ys>12080 & ys<=14510 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.06 if ys>14510 & ys<=16930 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=372.3 if ys>14510 & ys<=16930 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=14510 if ys>14510 & ys<=16930 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.07 if ys>16930 & ys<=19330 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=517.5 if ys>16930 & ys<=19330 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=16930 if ys>16930 & ys<=19330 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.08 if ys>19330 & ys<=21760 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=685.5 if ys>19330 & ys<=21760 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=19330 if ys>19330 & ys<=21760 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.09 if ys>21760 & ys<=24180 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=879.9 if ys>21760 & ys<=24180 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=21760 if ys>21760 & ys<=24180 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.10 if ys>24180 & ys<=26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=1097.7 if ys>24180 & ys<=26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=24180 if ys>24180 & ys<=26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace smtr=.11 if ys>26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace sbase=1339.7 if ys>26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace slb=26600 if ys>26600 & (psu==1421 | psu==1422 | psu==1424) & (year==84 | year==85)
replace staxpd=(sbase+(ys-slb)*smtr)/2 - stcrper if (year<84) & (psu==1421 | psu==1422 | psu==1424)
replace staxpd=sbase+(ys-slb)*smtr - stcrper if (year>=84) & (psu==1421 | psu==1422 | psu==1424)

```

*Colorado: Federal taxes are deductible

```

replace stexper=850 if psu==1433 | psu==2433
replace ys=earn1-stexper - 1415 - fedtxpd if (psu==1433 | psu==2433) & year<=84
replace ys=earn1-stexper - 1420 - fedtxpd if (psu==1433 | psu==2433) & year==85
replace smtr=.025 if ys<=1415 & (psu==1433 | psu==2433) & year<=83
replace smtr=.03 if ys>1415 & ys<=2831 & (psu==1433 | psu==2433) & year<=83
replace sbase=35.38 if ys>1415 & ys<=2831 & (psu==1433 | psu==2433) & year<=83
replace slb=1415 if ys>1415 & ys<=2831 & (psu==1433 | psu==2433) & year<=83
replace smtr=.035 if ys>2831 & ys<=4246 & (psu==1433 | psu==2433) & year<=83
replace sbase=77.86 if ys>2831 & ys<=4246 & (psu==1433 | psu==2433) & year<=83
replace slb=2831 if ys>2831 & ys<=4246 & (psu==1433 | psu==2433) & year<=83
replace smtr=.04 if ys>4246 & ys<=5661 & (psu==1433 | psu==2433) & year<=83
replace sbase=127.38 if ys>4246 & ys<=5661 & (psu==1433 | psu==2433) & year<=83
replace slb=4246 if ys>4246 & ys<=5661 & (psu==1433 | psu==2433) & year<=83
replace smtr=.045 if ys>5661 & ys<=7076 & (psu==1433 | psu==2433) & year<=83
replace sbase=183.98 if ys>5661 & ys<=7076 & (psu==1433 | psu==2433) & year<=83
replace slb=5661 if ys>5661 & ys<=7076 & (psu==1433 | psu==2433) & year<=83
replace smtr=.05 if ys>7076 & ys<=8492 & (psu==1433 | psu==2433) & year<=83

```

```

replace sbase=247.66 if ys>7076 & ys<=8492 & (psu==1433 | psu==2433) & year<=83
replace slb=7076 if ys>7076 & ys<=8492 & (psu==1433 | psu==2433) & year<=83
replace smtr=.055 if ys>8492 & ys<=9907 & (psu==1433 | psu==2433) & year<=83
replace sbase=318.46 if ys>8492 & ys<=9907 & (psu==1433 | psu==2433) & year<=83
replace slb=8492 if ys>8492 & ys<=9907 & (psu==1433 | psu==2433) & year<=83
replace smtr=.06 if ys>9907 & ys<=11322 & (psu==1433 | psu==2433) & year<=83
replace sbase=396.28 if ys>9907 & ys<=11322 & (psu==1433 | psu==2433) & year<=83
replace slb=9907 if ys>9907 & ys<=11322 & (psu==1433 | psu==2433) & year<=83
replace smtr=.065 if ys>11322 & ys<=12738 & (psu==1433 | psu==2433) & year<=83
replace sbase=481.18 if ys>11322 & ys<=12738 & (psu==1433 | psu==2433) & year<=83
replace slb=11322 if ys>11322 & ys<=12738 & (psu==1433 | psu==2433) & year<=83
replace smtr=.075 if ys>12738 & ys<=14153 & (psu==1433 | psu==2433) & year<=83
replace sbase=573.22 if ys>12738 & ys<=14153 & (psu==1433 | psu==2433) & year<=83
replace slb=12738 if ys>12738 & ys<=14153 & (psu==1433 | psu==2433) & year<=83
replace smtr=.08 if ys>14153 & (psu==1433 | psu==2433) & year<=83
replace sbase=679.35 if ys>14153 & (psu==1433 | psu==2433) & year<=83
replace slb=14153 if ys>14153 & (psu==1433 | psu==2433) & year<=83
replace smtr=.025 if ys<=1420 & (psu==1433 | psu==2433) & year>=84
replace smtr=.03 if ys>1420 & ys<=2830 & (psu==1433 | psu==2433) & year>=84
replace sbase=35.5 if ys>1420 & ys<=2830 & (psu==1433 | psu==2433) & year>=84
replace slb=1420 if ys>1420 & ys<=2830 & (psu==1433 | psu==2433) & year>=84
replace smtr=.035 if ys>2830 & ys<=4250 & (psu==1433 | psu==2433) & year>=84
replace sbase=77.8 if ys>2830 & ys<=4250 & (psu==1433 | psu==2433) & year>=84
replace slb=2830 if ys>2830 & ys<=4250 & (psu==1433 | psu==2433) & year>=84
replace smtr=.04 if ys>4250 & ys<=5660 & (psu==1433 | psu==2433) & year>=84
replace sbase=127.5 if ys>4250 & ys<=5660 & (psu==1433 | psu==2433) & year>=84
replace slb=4250 if ys>4250 & ys<=5660 & (psu==1433 | psu==2433) & year>=84
replace smtr=.045 if ys>5660 & ys<=7080 & (psu==1433 | psu==2433) & year>=84
replace sbase=183.9 if ys>5660 & ys<=7080 & (psu==1433 | psu==2433) & year>=84
replace slb=5660 if ys>5660 & ys<=7080 & (psu==1433 | psu==2433) & year>=84
replace smtr=.05 if ys>7080 & ys<=8490 & (psu==1433 | psu==2433) & year>=84
replace sbase=247.8 if ys>7080 & ys<=8490 & (psu==1433 | psu==2433) & year>=84
replace slb=7080 if ys>7080 & ys<=8490 & (psu==1433 | psu==2433) & year>=84
replace smtr=.055 if ys>8490 & ys<=9910 & (psu==1433 | psu==2433) & year>=84
replace sbase=318.3 if ys>8490 & ys<=9910 & (psu==1433 | psu==2433) & year>=84
replace slb=8490 if ys>8490 & ys<=9910 & (psu==1433 | psu==2433) & year>=84
replace smtr=.06 if ys>9910 & ys<=11320 & (psu==1433 | psu==2433) & year>=84
replace sbase=396.4 if ys>9910 & ys<=11320 & (psu==1433 | psu==2433) & year>=84
replace slb=9910 if ys>9910 & ys<=11320 & (psu==1433 | psu==2433) & year>=84
replace smtr=.065 if ys>11320 & ys<=12740 & (psu==1433 | psu==2433) & year>=84
replace sbase=481 if ys>11320 & ys<=12740 & (psu==1433 | psu==2433) & year>=84
replace slb=11320 if ys>11320 & ys<=12740 & (psu==1433 | psu==2433) & year>=84
replace smtr=.075 if ys>12740 & ys<=14150 & (psu==1433 | psu==2433) & year>=84
replace sbase=573.3 if ys>12740 & ys<=14150 & (psu==1433 | psu==2433) & year>=84
replace slb=12740 if ys>12740 & ys<=14150 & (psu==1433 | psu==2433) & year>=84
replace smtr=.08 if ys>14150 & (psu==1433 | psu==2433) & year>=84
replace sbase=679.05 if ys>14150 & (psu==1433 | psu==2433) & year>=84
replace slb=14150 if ys>14150 & (psu==1433 | psu==2433) & year>=84
replace staxpd=sbase+(ys-slb)*smtr if (psu==1433 | psu==2433)

```

* Georgia: state person exemption is 1500

```

replace sstded=earn1*.15 if psu==1319
replace ys=earn1-1500-2300 if sstded<=2300 & psu==1319
replace ys=earn1-1500-sstded if sstded>2300 & psu==1319
replace smtr=0 if ys<=0 & psu==1319
replace smtr=.01 if ys>0 & ys<=750 & psu==1319
replace smtr=.02 if ys>750 & ys<=2250 & psu==1319
replace sbase=7.5 if ys>750 & ys<=2250 & psu==1319
replace slb=750 if ys>750 & ys<=2250 & psu==1319
replace smtr=.03 if ys>2250 & ys<=3750 & psu==1319
replace sbase=37.5 if ys>2250 & ys<=3750 & psu==1319
replace slb=2250 if ys>2250 & ys<=3750 & psu==1319
replace smtr=.04 if ys>3750 & ys<=5250 & psu==1319

```

```

replace sbase=82.5 if ys>3750 & ys<=5250 & psu==1319
replace slb=3750 if ys>3750 & ys<=5250 & psu==1319
replace smtr=.05 if ys>5250 & ys<=7000 & psu==1319
replace sbase=142.5 if ys>5250 & ys<=7000 & psu==1319
replace slb=5250 if ys>5250 & ys<=7000 & psu==1319
replace smtr=.06 if ys>7000 & psu==1319
replace sbase=230 if ys>7000 & psu==1319
replace slb=7000 if ys>7000 & psu==1319
replace staxpd=sbase+(ys-slb)*smtr if psu==1319

```

*Hawaii - Married Filing Jointly (MFJ) rates are below.

```

replace stexper=1000 if psu==1426 & (year==82 | year==83 | year==84)
replace stexper=1040 if psu==1426 & year==85
replace ys=(earn1-stexper-800)*2 if psu==1426
replace smtr=0 if ys<=1000 & psu==1426
replace sbase=0 if ys<=1000 & psu==1426
replace smtr=.0225 if ys>1000 & ys<=2000 & psu==1426
replace sbase=0 if ys>1000 & ys<=2000 & psu==1426
replace slb=1000 if ys>1000 & ys<=2000 & psu==1426
replace smtr=.0325 if ys>2000 & ys<=3000 & psu==1426
replace sbase=22.5 if ys>2000 & ys<=3000 & psu==1426
replace slb=2000 if ys>2000 & ys<=3000 & psu==1426
replace smtr=.045 if ys>3000 & ys<=4000 & psu==1426
replace sbase=55 if ys>3000 & ys<=4000 & psu==1426
replace slb=3000 if ys>3000 & ys<=4000 & psu==1426
replace smtr=.05 if ys>4000 & ys<=5000 & psu==1426
replace sbase=100 if ys>4000 & ys<=5000 & psu==1426
replace slb=4000 if ys>4000 & ys<=5000 & psu==1426
replace smtr=.065 if ys>5000 & ys<=7000 & psu==1426
replace sbase=150 if ys>5000 & ys<=7000 & psu==1426
replace slb=5000 if ys>5000 & ys<=7000 & psu==1426
replace smtr=.075 if ys>7000 & ys<=11000 & psu==1426
replace sbase=280 if ys>7000 & ys<=11000 & psu==1426
replace slb=7000 if ys>7000 & ys<=11000 & psu==1426
replace smtr=.085 if ys>11000 & ys<=21000 & psu==1426
replace sbase=580 if ys>11000 & ys<=21000 & psu==1426
replace slb=11000 if ys>11000 & ys<=21000 & psu==1426
replace smtr=.095 if ys>21000 & ys<=29000 & psu==1426
replace sbase=1430 if ys>21000 & ys<=29000 & psu==1426
replace slb=21000 if ys>21000 & ys<=29000 & psu==1426
replace smtr=.10 if ys>29000 & ys<=41000 & psu==1426
replace sbase=2190 if ys>29000 & ys<=41000 & psu==1426
replace slb=29000 if ys>29000 & ys<=41000 & psu==1426
replace smtr=.105 if ys>41000 & ys<=61000 & psu==1426
replace sbase=3390 if ys>41000 & ys<=61000 & psu==1426
replace slb=41000 if ys>41000 & ys<=61000 & psu==1426
replace smtr=.11 if ys>61000 & psu==1426
replace sbase=5490 if ys>61000 & psu==1426
replace slb=61000 if ys>61000 & psu==1426
replace staxpd=(sbase+(ys-slb)*smtr)/2 if psu==1426

```

*Washington, D.C.

```

replace stexper=750 if psu==1315 & (year==82 | year==83)
replace stexper=1040 if psu==1315 & year==84
replace stexper=1080 if psu==1315 & year==85
replace sstded=earn1*.10 if psu==1315
replace ys=earn1-stexper-sstded if sstded<1000 & psu==1315 & year<=84
replace ys=earn1-stexper-1000 if (sstded>=1000 & psu==1315 & year<=84) | (year==85 & psu==1315)
*tax rates below are for married filing jointly so multiply ys by 2 and divide taxes by 2 in end
replace ys=ys*2 if psu==1315
replace smtr=.02 if ys<=1000 & psu==1315
replace smtr=.03 if ys>1000 & ys<=2000 & psu==1315
replace sbase=20 if ys>1000 & ys<=2000 & psu==1315

```

```

replace slb=1000 if ys>1000 & ys<=2000 & psu==1315
replace smtr=.04 if ys>2000 & ys<=3000 & psu==1315
replace sbase=50 if ys>2000 & ys<=3000 & psu==1315
replace slb=2000 if ys>2000 & ys<=3000 & psu==1315
replace smtr=.05 if ys>3000 & ys<=4000 & psu==1315
replace sbase=90 if ys>3000 & ys<=4000 & psu==1315
replace slb=3000 if ys>3000 & ys<=4000 & psu==1315
replace smtr=.06 if ys>4000 & ys<=5000 & psu==1315
replace sbase=140 if ys>4000 & ys<=5000 & psu==1315
replace slb=4000 if ys>4000 & ys<=5000 & psu==1315
replace smtr=.07 if ys>5000 & ys<=10000 & psu==1315
replace sbase=200 if ys>5000 & ys<=10000 & psu==1315
replace slb=5000 if ys>5000 & ys<=10000 & psu==1315
replace smtr=.08 if ys>10000 & ys<=13000 & psu==1315
replace sbase=550 if ys>10000 & ys<=13000 & psu==1315
replace slb=10000 if ys>10000 & ys<=13000 & psu==1315
replace smtr=.09 if ys>13000 & ys<=17000 & psu==1315
replace sbase=790 if ys>13000 & ys<=17000 & psu==1315
replace slb=13000 if ys>13000 & ys<=17000 & psu==1315
replace smtr=.10 if ys>17000 & ys<=25000 & psu==1315
replace sbase=1150 if ys>17000 & ys<=25000 & psu==1315
replace slb=17000 if ys>17000 & ys<=25000 & psu==1315
replace smtr=.11 if ys>25000 & psu==1315
replace sbase=1950 if ys>25000 & psu==1315
replace slb=25000 if ys>25000 & psu==1315
replace staxpd=(sbase+(ys-slb)*smtr)/2 - stcrper if psu==1315

```

```

*Illinois - personal exemption is 1000.
replace smtr=.03 if psu==1207 & year<=83
replace smtr=.025 if psu==1207 & year>=84
replace staxpd=(earn1-1000)*smtr if psu==1207

```

```

* Maryland - (psu 1317 is Baltimore) Personal exemption is $800 for single.
* Brackets are for single people

```

```

replace sstded=earn1*.13 if psu==1317
replace ys=earn1-sstded-800 if sstded<=1500 & psu==1317
replace ys=earn1-1500-800 if sstded>1500 & psu==1317
replace smtr=.02 if ys<=1000 & psu==1317
replace smtr=.03 if ys>1000 & ys<=2000 & psu==1317
replace sbase=20 if ys>1000 & ys<=2000 & psu==1317
replace slb=1000 if ys>1000 & ys<=2000 & psu==1317
replace smtr=.04 if ys>2000 & ys<=3000 & psu==1317
replace sbase=50 if ys>2000 & ys<=3000 & psu==1317
replace slb=2000 if ys>2000 & ys<=3000 & psu==1317
replace smtr=.05 if ys>3000 & psu==1317
replace sbase=90 if ys>3000 & psu==1317
replace slb=3000 if ys>3000 & psu==1317
replace staxpd=(sbase+(ys-slb)*smtr) if psu==1317

```

```

*Massachusetts
replace ys= earn1-2200 if psu==1103
replace smtr=.05375 if psu==1103
replace staxpd=ys*smtr if psu==1103

```

```

*Michigan-state personal exemption is 1500
replace ys= earn1-1500 if psu==1208
replace smtr=.0635 if year<=83 & psu==1208
replace smtr=.061 if year==84 & psu==1208
replace smtr=.0535 if year==85 & psu==1208
replace staxpd=ys*smtr if psu==1208

```

```

*Minnesota: Federal taxes are deductible
replace stcrper=67 if (year==82| year==83) & psu==1211

```

```

replace stcrper=70 if (year==84| year==85) & psu==1211
replace sstded=earn1*.10 if psu==1211
replace ys=earn1-fedtxpd-sstded if sstded<=2250 & year<=83 & psu==1211
replace ys=earn1-fedtxpd-2250 if sstded>2250 & year<=83 & psu==1211
replace ys=ys*2 if year<=83 & psu==1211
replace smtr=.016 if ys<=667 & year==82 & psu==1211
replace smtr=.022 if ys>667 & ys<=1334 & year==82 & psu==1211
replace sbase=10.67 if ys>667 & ys<=1334 & year==82 & psu==1211
replace slb=667 if ys>667 & ys<=1334 & year==82 & psu==1211
replace smtr=.035 if ys>1334 & ys<=2666 & year==82 & psu==1211
replace sbase=25.35 if ys>1334 & ys<=2666 & year==82 & psu==1211
replace slb=1334 if ys>1334 & ys<=2666 & year==82 & psu==1211
replace smtr=.058 if ys>2666 & ys<=3998 & year==82 & psu==1211
replace sbase=71.97 if ys>2666 & ys<=3998 & year==82 & psu==1211
replace slb=2666 if ys>2666 & ys<=3998 & year==82 & psu==1211
replace smtr=.073 if ys>3998 & ys<=5330 & year==82 & psu==1211
replace sbase=149.22 if ys>3998 & ys<=5330 & year==82 & psu==1211
replace slb=3998 if ys>3998 & ys<=5330 & year==82 & psu==1211
replace smtr=.088 if ys>5330 & ys<=6662 & year==82 & psu==1211
replace sbase=246.46 if ys>5330 & ys<=6662 & year==82 & psu==1211
replace slb=5330 if ys>5330 & ys<=6662 & year==82 & psu==1211
replace smtr=.102 if ys>6662 & ys<=9326 & year==82 & psu==1211
replace sbase=363.67 if ys>6662 & ys<=9326 & year==82 & psu==1211
replace slb=6662 if ys>6662 & ys<=9326 & year==82 & psu==1211
replace smtr=.115 if ys>9326 & ys<=11990 & year==82 & psu==1211
replace sbase=635.4 if ys>9326 & ys<=11990 & year==82 & psu==1211
replace slb=9326 if ys>9326 & ys<=11990 & year==82 & psu==1211
replace smtr=.128 if ys>11990 & ys<=16652 & year==82 & psu==1211
replace sbase=941.76 if ys>11990 & ys<=16652 & year==82 & psu==1211
replace slb=11990 if ys>11990 & ys<=16652 & year==82 & psu==1211
replace smtr=.14 if ys>16652 & ys<=26644 & year==82 & psu==1211
replace sbase=1538.5 if ys>16652 & ys<=26644 & year==82 & psu==1211
replace slb=16652 if ys>16652 & ys<=26644 & year==82 & psu==1211
replace smtr=.15 if ys>26644 & ys<=36632 & year==82 & psu==1211
replace sbase=2937.38 if ys>26644 & ys<=36632 & year==82 & psu==1211
replace slb=26644 if ys>26644 & ys<=36632 & year==82 & psu==1211
replace smtr=.16 if ys>36632 & year==82 & psu==1211
replace sbase=4435.58 if ys>36632 & year==82 & psu==1211
replace slb=36632 if ys>36632 & year==82 & psu==1211
replace staxpd= (sbase+(ys-slb)*smtr)/2-stcrper if year==82 & psu==1211
replace smtr=.016 if ys<=672 & year==83 & psu==1211
replace sbase=0 if ys<=672 & year==83 & psu==1211
replace slb=0 if ys<=672 & year==83 & psu==1211
replace smtr=.022 if ys>672 & ys<=1345 & year==83 & psu==1211
replace sbase=10.75 if ys>672 & ys<=1345 & year==83 & psu==1211
replace slb=672 if ys>672 & ys<=1345 & year==83 & psu==1211
replace smtr=.035 if ys>1345 & ys<=2687 & year==83 & psu==1211
replace sbase=25.56 if ys>1345 & ys<=2687 & year==83 & psu==1211
replace slb=1345 if ys>1345 & ys<=2687 & year==83 & psu==1211
replace smtr=.058 if ys>2687 & ys<=4030 & year==83 & psu==1211
replace sbase=72.53 if ys>2687 & ys<=4030 & year==83 & psu==1211
replace slb=2687 if ys>2687 & ys<=4030 & year==83 & psu==1211
replace smtr=.073 if ys>4030 & ys<=5373 & year==83 & psu==1211
replace sbase=150.42 if ys>4030 & ys<=5373 & year==83 & psu==1211
replace slb=4030 if ys>4030 & ys<=5373 & year==83 & psu==1211
replace smtr=.088 if ys>5373 & ys<=6716 & year==83 & psu==1211
replace sbase=248.46 if ys>5373 & ys<=6716 & year==83 & psu==1211
replace slb=5373 if ys>5373 & ys<=6716 & year==83 & psu==1211
replace smtr=.102 if ys>6716 & ys<=9401 & year==83 & psu==1211
replace sbase=366.65 if ys>6716 & ys<=9401 & year==83 & psu==1211
replace slb=6716 if ys>6716 & ys<=9401 & year==83 & psu==1211
replace smtr=.115 if ys>9401 & ys<=12068 & year==83 & psu==1211
replace sbase=640.52 if ys>9401 & ys<=12068 & year==83 & psu==1211

```

```

replace slb=9401      if ys>9401 & ys<=12068 & year==83 & psu==1211
replace smtr=.128    if ys>12068 & ys<=16785 & year==83 & psu==1211
replace sbase=947.22 if ys>12068 & ys<=16785 & year==83 & psu==1211
replace slb=12068    if ys>12068 & ys<=16785 & year==83 & psu==1211
replace smtr=.14     if ys>16785 & ys<=26855 & year==83 & psu==1211
replace sbase=1551   if ys>16785 & ys<=26855 & year==83 & psu==1211
replace slb=16785    if ys>16785 & ys<=26855 & year==83 & psu==1211
replace smtr=.15     if ys>26855 & ys<=36925 & year==83 & psu==1211
replace sbase=2960.8 if ys>26855 & ys<=36925 & year==83 & psu==1211
replace slb=26855    if ys>26855 & ys<=36925 & year==83 & psu==1211
replace smtr=.16     if ys>36925 & year==83 & psu==1211
replace sbase=4471.3 if ys>36925 & year==83 & psu==1211
replace slb=36925    if ys>36925 & year==83 & psu==1211
replace staxpd= (sbase+(ys-slb)*smtr)/2-stcrper if year==83 & psu==1211
replace ys=earn1-fedtxpd-sstdded if sstdded<=2268 & year==84 & psu==1211
replace ys=earn1-fedtxpd-2268 if sstdded>2268 & year==84 & psu==1211
replace ys=0         if ys<0 & year==84 & psu==1211
replace ys=ys*2     if year==84 & psu==1211
replace smtr=.016   if ys<=690 & year==84 & psu==1211
replace sbase=0     if ys<=690 & year==84 & psu==1211
replace slb=0       if ys<=690 & year==84 & psu==1211
replace smtr=.022   if ys>690 & ys<=1380 & year==84 & psu==1211
replace sbase=11.04 if ys>690 & ys<=1380 & year==84 & psu==1211
replace slb=690     if ys>690 & ys<=1380 & year==84 & psu==1211
replace smtr=.035   if ys>1380 & ys<=2759 & year==84 & psu==1211
replace sbase=26.22 if ys>1380 & ys<=2759 & year==84 & psu==1211
replace slb=1380    if ys>1380 & ys<=2759 & year==84 & psu==1211
replace smtr=.058   if ys>2759 & ys<=4138 & year==84 & psu==1211
replace sbase=74.49 if ys>2759 & ys<=4138 & year==84 & psu==1211
replace slb=2759    if ys>2759 & ys<=4138 & year==84 & psu==1211
replace smtr=.073   if ys>4138 & ys<=5517 & year==84 & psu==1211
replace sbase=154.47 if ys>4138 & ys<=5517 & year==84 & psu==1211
replace slb=4138    if ys>4138 & ys<=5517 & year==84 & psu==1211
replace smtr=.088   if ys>5517 & ys<=6896 & year==84 & psu==1211
replace sbase=255.13 if ys>5517 & ys<=6896 & year==84 & psu==1211
replace slb=5517    if ys>5517 & ys<=6896 & year==84 & psu==1211
replace smtr=.102   if ys>6896 & ys<=9653 & year==84 & psu==1211
replace sbase=376.48 if ys>6896 & ys<=9653 & year==84 & psu==1211
replace slb=6896    if ys>6896 & ys<=9653 & year==84 & psu==1211
replace smtr=.115   if ys>9653 & ys<=12410 & year==84 & psu==1211
replace sbase=657.7 if ys>9653 & ys<=12410 & year==84 & psu==1211
replace slb=9653    if ys>9653 & ys<=12410 & year==84 & psu==1211
replace smtr=.128   if ys>12410 & ys<=17236 & year==84 & psu==1211
replace sbase=974.76 if ys>12410 & ys<=17236 & year==84 & psu==1211
replace slb=12410   if ys>12410 & ys<=17236 & year==84 & psu==1211
replace smtr=.14    if ys>17236 & ys<=27578 & year==84 & psu==1211
replace sbase=1592.48 if ys>17236 & ys<=27578 & year==84 & psu==1211
replace slb=17236   if ys>17236 & ys<=27578 & year==84 & psu==1211
replace smtr=.15    if ys>27578 & ys<=36925 & year==84 & psu==1211
replace sbase=3040.36 if ys>27578 & ys<=36925 & year==84 & psu==1211
replace slb=27578   if ys>27578 & ys<=36925 & year==84 & psu==1211
replace smtr=.16    if ys>37920 & year==84 & psu==1211
replace sbase=4591.66 if ys>37920 & year==84 & psu==1211
replace slb=37920   if ys>37920 & year==84 & psu==1211
replace staxpd= (sbase+(ys-slb)*smtr)/2-stcrper if year==84 & psu==1211
replace ys=earn1-fedtxpd-sstdded if sstdded<=2400 & year==85 & psu==1211
replace ys=earn1-fedtxpd-2268 if sstdded>2400 & year==85 & psu==1211
replace ys=ys*2     if year==85 & psu==1211
replace smtr=.016   if ys<=875 & year==85 & psu==1211
replace sbase=0     if ys<=875 & year==85 & psu==1211
replace slb=0       if ys<=875 & year==85 & psu==1211
replace smtr=.02    if ys>875 & ys<=1750 & year==85 & psu==1211
replace sbase=13.13 if ys>875 & ys<=1750 & year==85 & psu==1211

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replace slb=875      if ys>875  & ys<=1750    & year==85 & psu==1211
replace smtr=.029   if ys>1750 & ys<=3500    & year==85 & psu==1211
replace sbase=30.63 if ys>1750 & ys<=3500    & year==85 & psu==1211
replace slb=1750    if ys>1750 & ys<=3500    & year==85 & psu==1211
replace smtr=.048   if ys>3500 & ys<=5375    & year==85 & psu==1211
replace sbase=81.38 if ys>3500 & ys<=5375    & year==85 & psu==1211
replace slb=3500    if ys>3500 & ys<=5375    & year==85 & psu==1211
replace smtr=.059   if ys>5375 & ys<=7000    & year==85 & psu==1211
replace sbase=171.38 if ys>5375 & ys<=7000    & year==85 & psu==1211
replace slb=5375    if ys>5375 & ys<=7000    & year==85 & psu==1211
replace smtr=.061   if ys>7000 & ys<=7125    & year==85 & psu==1211
replace sbase=267.25 if ys>7000 & ys<=7125    & year==85 & psu==1211
replace slb=7000    if ys>7000 & ys<=7125    & year==85 & psu==1211
replace smtr=.072   if ys>7125 & ys<=8875    & year==85 & psu==1211
replace sbase=274.88 if ys>7125 & ys<=8875    & year==85 & psu==1211
replace slb=7125    if ys>7125 & ys<=8875    & year==85 & psu==1211
replace smtr=.083   if ys>8875 & ys<=12375   & year==85 & psu==1211
replace sbase=400.88 if ys>8875 & ys<=12375   & year==85 & psu==1211
replace slb=8875    if ys>8875 & ys<=12375   & year==85 & psu==1211
replace smtr=.093   if ys>12375 & ys<=14000  & year==85 & psu==1211
replace sbase=691.38 if ys>12375 & ys<=14000  & year==85 & psu==1211
replace slb=12375   if ys>12375 & ys<=14000  & year==85 & psu==1211
replace smtr=.1     if ys>14000 & ys<=16000  & year==85 & psu==1211
replace sbase=842.5 if ys>14000 & ys<=16000  & year==85 & psu==1211
replace slb=14000   if ys>14000 & ys<=16000  & year==85 & psu==1211
replace smtr=.11    if ys>16000 & ys<=21500  & year==85 & psu==1211
replace sbase=1042.5 if ys>16000 & ys<=21500  & year==85 & psu==1211
replace slb=16000   if ys>16000 & ys<=21500  & year==85 & psu==1211
replace smtr=.113   if ys>21500 & ys<=22125  & year==85 & psu==1211
replace sbase=1647.5 if ys>21500 & ys<=22125  & year==85 & psu==1211
replace slb=21500   if ys>21500 & ys<=22125  & year==85 & psu==1211
replace smtr=.123   if ys>22125 & ys<=25500  & year==85 & psu==1211
replace sbase=1718.13 if ys>22125 & ys<=25500  & year==85 & psu==1211
replace slb=22125   if ys>22125 & ys<=25500  & year==85 & psu==1211
replace smtr=.126   if ys>25500 & ys<=28500  & year==85 & psu==1211
replace sbase=2133.25 if ys>25500 & ys<=28500  & year==85 & psu==1211
replace slb=21500   if ys>25500 & ys<=28500  & year==85 & psu==1211
replace smtr=.137   if ys>28500 & ys<=31750  & year==85 & psu==1211
replace sbase=2511.25 if ys>28500 & ys<=31750  & year==85 & psu==1211
replace slb=28500   if ys>28500 & ys<=31750  & year==85 & psu==1211
replace smtr=.14    if ys>31750          & year==85 & psu==1211
replace sbase=2956.50 if ys>31750          & year==85 & psu==1211
replace slb=37920   if ys>31750          & year==85 & psu==1211
replace staxpd= (sbase+(ys-slb)*smtr)/2-stcrper if year==85 & psu==1211

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*Missouri: psu 1209 is St. Louis and psu 1214 is Kansas City

*Federal taxes are deductible

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replace stexper=1200 if (psu==1209 | psu==1214)
replace stexdep=400  if (psu==1209 | psu==1214)
replace sstded=2300  if year<=84 & (psu==1209 | psu==1214)
replace sstded=2390  if year==85 & (psu==1209 | psu==1214)
replace ys=earn1-stexper-sstded-fedtxpd if (psu==1209 | psu==1214)
replace smtr=.015    if ys<=1000 & (psu==1209 | psu==1214)
replace smtr=.02     if ys>1000 & ys<=2000 & (psu==1209 | psu==1214)
replace sbase=15     if ys>1000 & ys<=2000 & (psu==1209 | psu==1214)
replace slb=1000     if ys>1000 & ys<=2000 & (psu==1209 | psu==1214)
replace smtr=.025    if ys>2000 & ys<=3000 & (psu==1209 | psu==1214)
replace sbase=35     if ys>2000 & ys<=3000 & (psu==1209 | psu==1214)
replace slb=2000     if ys>2000 & ys<=3000 & (psu==1209 | psu==1214)
replace smtr=.03     if ys>3000 & ys<=4000 & (psu==1209 | psu==1214)
replace sbase=60     if ys>3000 & ys<=4000 & (psu==1209 | psu==1214)
replace slb=3000     if ys>3000 & ys<=4000 & (psu==1209 | psu==1214)
replace smtr=.035    if ys>4000 & ys<=5000 & (psu==1209 | psu==1214)

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replace sbase=90 if ys>4000 & ys<=5000 & (psu==1209 | psu==1214)
replace slb=4000 if ys>4000 & ys<=5000 & (psu==1209 | psu==1214)
replace smtr=.04 if ys>5000 & ys<=6000 & (psu==1209 | psu==1214)
replace sbase=125 if ys>5000 & ys<=6000 & (psu==1209 | psu==1214)
replace slb=5000 if ys>5000 & ys<=6000 & (psu==1209 | psu==1214)
replace smtr=.045 if ys>6000 & ys<=7000 & (psu==1209 | psu==1214)
replace sbase=165 if ys>6000 & ys<=7000 & (psu==1209 | psu==1214)
replace slb=6000 if ys>6000 & ys<=7000 & (psu==1209 | psu==1214)
replace smtr=.05 if ys>7000 & ys<=8000 & (psu==1209 | psu==1214)
replace sbase=210 if ys>7000 & ys<=8000 & (psu==1209 | psu==1214)
replace slb=7000 if ys>7000 & ys<=8000 & (psu==1209 | psu==1214)
replace smtr=.055 if ys>8000 & ys<=9000 & (psu==1209 | psu==1214)
replace sbase=260 if ys>8000 & ys<=9000 & (psu==1209 | psu==1214)
replace slb=8000 if ys>8000 & ys<=9000 & (psu==1209 | psu==1214)
replace smtr=.06 if ys>9000 & (psu==1209 | psu==1214)
replace sbase=315 if ys>9000 & (psu==1209 | psu==1214)
replace slb=9000 if ys>9000 & (psu==1209 | psu==1214)
replace staxpd=sbase+(ys-slb)*smtr if (psu==1209 | psu==1214)

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*New York

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replace stexper=800 if (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year<=83
replace stexper=850 if (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year>=84
replace sstded=earn1*.17 if (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace ys=earn1-stexper-sstded if sstded<2500 & (psu==1101 | psu==1110 | psu==1111 | psu==1105) & (year<=84)
replace ys=earn1-stexper-2500 if sstded>2500 & (psu==1101 | psu==1110 | psu==1111 | psu==1105) & (year<=84)
replace ys=earn1-stexper-2500 if (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year==85
replace smtr=.02 if ys<=1000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.03 if ys>1000 & ys<=3000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=20 if ys>1000 & ys<=3000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=1000 if ys>1000 & ys<=3000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.04 if ys>3000 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=80 if ys>3000 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=3000 if ys>3000 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.05 if ys>5000 & ys<=7000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=160 if ys>5000 & ys<=7000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=5000 if ys>5000 & ys<=7000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.06 if ys>7000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=260 if ys>7000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=7000 if ys>7000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.07 if ys>9000 & ys<=11000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=380 if ys>9000 & ys<=11000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=9000 if ys>9000 & ys<=11000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.08 if ys>11000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=520 if ys>11000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=11000 if ys>11000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.09 if ys>13000 & ys<=15000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=680 if ys>13000 & ys<=15000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=13000 if ys>13000 & ys<=15000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.10 if ys>15000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=860 if ys>15000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=15000 if ys>15000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.11 if ys>17000 & ys<=19000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=1060 if ys>17000 & ys<=19000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=17000 if ys>17000 & ys<=19000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.12 if ys>19000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=1280 if ys>19000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=19000 if ys>19000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.13 if ys>21000 & ys<=23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace sbase=1520 if ys>21000 & ys<=23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace slb=21000 if ys>21000 & ys<=23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace smtr=.14 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year<85
replace smtr=.1375 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105) & year==85
replace sbase=1780 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)

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replace slb=23000 if ys>23000 & (psu==1101 | psu==1110 | psu==1111 | psu==1105)
replace staxpd=sbase+(ys-slb)*smtr if (psu==1101 | psu==1110 | psu==1111 | psu==1105)
```

*Ohio

```
replace stexper=650 if (psu==1210 | psu==1213)
replace ys=2*(earn1-stexper) if (psu==1210 | psu==1213)
replace smtr=.00625 if ys<=5000 & (psu==1210 | psu==1213)
replace smtr=.0125 if ys>5000 & ys<=10000 & year==82 & (psu==1210 | psu==1213)
replace sbase=31.25 if ys>5000 & ys<=10000 & year==82 & (psu==1210 | psu==1213)
replace slb=5000 if ys>5000 & ys<=10000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.025 if ys>10000 & ys<=15000 & year==82 & (psu==1210 | psu==1213)
replace sbase=93.75 if ys>10000 & ys<=15000 & year==82 & (psu==1210 | psu==1213)
replace slb=10000 if ys>10000 & ys<=15000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.03125 if ys>15000 & ys<=20000 & year==82 & (psu==1210 | psu==1213)
replace sbase=218.75 if ys>15000 & ys<=20000 & year==82 & (psu==1210 | psu==1213)
replace slb=15000 if ys>15000 & ys<=20000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.0375 if ys>20000 & ys<=40000 & year==82 & (psu==1210 | psu==1213)
replace sbase=375 if ys>20000 & ys<=40000 & year==82 & (psu==1210 | psu==1213)
replace slb=20000 if ys>20000 & ys<=40000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.04375 if ys>40000 & ys<=80000 & year==82 & (psu==1210 | psu==1213)
replace sbase=1125 if ys>40000 & ys<=80000 & year==82 & (psu==1210 | psu==1213)
replace slb=40000 if ys>40000 & ys<=80000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.05 if ys>80000 & ys<=100000 & year==82 & (psu==1210 | psu==1213)
replace sbase=2875 if ys>80000 & ys<=100000 & year==82 & (psu==1210 | psu==1213)
replace slb=80000 if ys>80000 & ys<=100000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.0625 if ys>100000 & year==82 & (psu==1210 | psu==1213)
replace sbase=3875 if ys>100000 & year==82 & (psu==1210 | psu==1213)
replace slb=100000 if ys>100000 & year==82 & (psu==1210 | psu==1213)
replace smtr=.009165 if ys<=5000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.01833 if ys>5000 & ys<=10000 & year==83 & (psu==1210 | psu==1213)
replace sbase=45.825 if ys>5000 & ys<=10000 & year==83 & (psu==1210 | psu==1213)
replace slb=5000 if ys>5000 & ys<=10000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.03666 if ys>10000 & ys<=15000 & year==83 & (psu==1210 | psu==1213)
replace sbase=137.48 if ys>10000 & ys<=15000 & year==83 & (psu==1210 | psu==1213)
replace slb=10000 if ys>10000 & ys<=15000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.045825 if ys>15000 & ys<=20000 & year==83 & (psu==1210 | psu==1213)
replace sbase=320.78 if ys>15000 & ys<=20000 & year==83 & (psu==1210 | psu==1213)
replace slb=15000 if ys>15000 & ys<=20000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.05499 if ys>20000 & ys<=40000 & year==83 & (psu==1210 | psu==1213)
replace sbase=549.905 if ys>20000 & ys<=40000 & year==83 & (psu==1210 | psu==1213)
replace slb=20000 if ys>20000 & ys<=40000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.064155 if ys>40000 & ys<=80000 & year==83 & (psu==1210 | psu==1213)
replace sbase=1649.705 if ys>40000 & ys<=80000 & year==83 & (psu==1210 | psu==1213)
replace slb=40000 if ys>40000 & ys<=80000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.07332 if ys>80000 & ys<=100000 & year==83 & (psu==1210 | psu==1213)
replace sbase=4215.905 if ys>80000 & ys<=100000 & year==83 & (psu==1210 | psu==1213)
replace slb=80000 if ys>80000 & ys<=100000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.09165 if ys>100000 & year==83 & (psu==1210 | psu==1213)
replace sbase=5682.305 if ys>100000 & year==83 & (psu==1210 | psu==1213)
replace slb=100000 if ys>100000 & year==83 & (psu==1210 | psu==1213)
replace smtr=.0095 if ys<=5000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.019 if ys>5000 & ys<=10000 & year==84 & (psu==1210 | psu==1213)
replace sbase=47.5 if ys>5000 & ys<=10000 & year==84 & (psu==1210 | psu==1213)
replace slb=5000 if ys>5000 & ys<=10000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.038 if ys>10000 & ys<=15000 & year==84 & (psu==1210 | psu==1213)
replace sbase=142.5 if ys>10000 & ys<=15000 & year==84 & (psu==1210 | psu==1213)
replace slb=10000 if ys>10000 & ys<=15000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.0475 if ys>15000 & ys<=20000 & year==84 & (psu==1210 | psu==1213)
replace sbase=332.5 if ys>15000 & ys<=20000 & year==84 & (psu==1210 | psu==1213)
replace slb=15000 if ys>15000 & ys<=20000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.057 if ys>20000 & ys<=40000 & year==84 & (psu==1210 | psu==1213)
replace sbase=570 if ys>20000 & ys<=40000 & year==84 & (psu==1210 | psu==1213)
replace slb=20000 if ys>20000 & ys<=40000 & year==84 & (psu==1210 | psu==1213)
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replace smtr=.0665 if ys>40000 & ys<=80000 & year==84 & (psu==1210 | psu==1213)
replace sbase=1710 if ys>40000 & ys<=80000 & year==84 & (psu==1210 | psu==1213)
replace slb=40000 if ys>40000 & ys<=80000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.076 if ys>80000 & ys<=100000 & year==84 & (psu==1210 | psu==1213)
replace sbase=4370 if ys>80000 & ys<=100000 & year==84 & (psu==1210 | psu==1213)
replace slb=80000 if ys>80000 & ys<=100000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.095 if ys>100000 & year==84 & (psu==1210 | psu==1213)
replace sbase=5890 if ys>100000 & year==84 & (psu==1210 | psu==1213)
replace slb=100000 if ys>100000 & year==84 & (psu==1210 | psu==1213)
replace smtr=.00903 if ys<=5000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.01805 if ys>5000 & ys<=10000 & year==85 & (psu==1210 | psu==1213)
replace sbase=45.15 if ys>5000 & ys<=10000 & year==85 & (psu==1210 | psu==1213)
replace slb=5000 if ys>5000 & ys<=10000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.0361 if ys>10000 & ys<=15000 & year==85 & (psu==1210 | psu==1213)
replace sbase=135.4 if ys>10000 & ys<=15000 & year==85 & (psu==1210 | psu==1213)
replace slb=10000 if ys>10000 & ys<=15000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.04513 if ys>15000 & ys<=20000 & year==85 & (psu==1210 | psu==1213)
replace sbase=315.9 if ys>15000 & ys<=20000 & year==85 & (psu==1210 | psu==1213)
replace slb=15000 if ys>15000 & ys<=20000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.05415 if ys>20000 & ys<=40000 & year==85 & (psu==1210 | psu==1213)
replace sbase=541.55 if ys>20000 & ys<=40000 & year==85 & (psu==1210 | psu==1213)
replace slb=20000 if ys>20000 & ys<=40000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.06318 if ys>40000 & ys<=80000 & year==85 & (psu==1210 | psu==1213)
replace sbase=1624.55 if ys>40000 & ys<=80000 & year==85 & (psu==1210 | psu==1213)
replace slb=40000 if ys>40000 & ys<=80000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.0722 if ys>80000 & ys<=100000 & year==85 & (psu==1210 | psu==1213)
replace sbase=4151.75 if ys>80000 & ys<=100000 & year==85 & (psu==1210 | psu==1213)
replace slb=80000 if ys>80000 & ys<=100000 & year==85 & (psu==1210 | psu==1213)
replace smtr=.09025 if ys>100000 & year==85 & (psu==1210 | psu==1213)
replace sbase=5595.75 if ys>100000 & year==85 & (psu==1210 | psu==1213)
replace slb=100000 if ys>100000 & year==85 & (psu==1210 | psu==1213)
replace staxpd=(sbase+(ys-slb)*smtr)/2 if (psu==1210 | psu==1213)

```

*Pennsylvania- Philly (1102) Pittsburgh (1104)

```

replace smtr=.022 if (psu==1102 | psu==1104) & year==82
replace smtr=.0245 if (psu==1102 | psu==1104) & year==83
replace smtr=.024 if (psu==1102 | psu==1104) & year==84
replace smtr=.0235 if (psu==1102 | psu==1104) & year==85
replace staxpd=earn1*smtr if (psu==1102 | psu==1104)

```

*Wisconsin

```

replace stcrper=20 if psu==1212
replace sstded=2300 if psu==1212
replace ys=2*(earn1-sstded) if psu==1212
replace smtr=.034 if ys<=3900 & psu==1212
replace smtr=.052 if ys>3900 & ys<=7700 & psu==1212
replace sbase=132.6 if ys>3900 & ys<=7700 & psu==1212
replace slb=3900 if ys>3900 & ys<=7700 & psu==1212
replace smtr=.07 if ys>7700 & ys<=11700 & psu==1212
replace sbase=330.2 if ys>7700 & ys<=11700 & psu==1212
replace slb=7700 if ys>7700 & ys<=11700 & psu==1212
replace smtr=.082 if ys>11700 & ys<=15500 & psu==1212
replace sbase=611 if ys>11700 & ys<=15500 & psu==1212
replace slb=11700 if ys>11700 & ys<=15500 & psu==1212
replace smtr=.087 if ys>15500 & ys<=19400 & psu==1212
replace sbase=922.6 if ys>15500 & ys<=19400 & psu==1212
replace slb=15500 if ys>15500 & ys<=19400 & psu==1212
replace smtr=.091 if ys>19400 & ys<=25800 & psu==1212
replace sbase=1261.9 if ys>19400 & ys<=25800 & psu==1212
replace slb=19400 if ys>19400 & ys<=25800 & psu==1212
replace smtr=.095 if ys>25800 & ys<=51600 & psu==1212
replace sbase=1844.3 if ys>25800 & ys<=51600 & psu==1212
replace slb=25800 if ys>25800 & ys<=51600 & psu==1212

```

```

replace smtr=.1      if ys>51600 & psu==1212
replace sbase=4295.3 if ys>51600 & psu==1212
replace slb=51600    if ys>51600 & psu==1212
replace staxpd=((sbase+(ys-slb)*smtr)/2)-stcrper if psu==1212
replace staxpd=0 if staxpd<0
replace smtr=0 if staxpd==0

*City marginal tax rates and taxbill
gen cmtr=0
label variable cmtr "city marginal tax rate"
gen ctaxpd=0
label variable ctaxpd "city taxes paid"
gen cb=0
gen clb=0
replace cmtr=.01 if (psu==1214 | psu==1209)
replace cmtr=.02 if (psu==1213 | psu==1210)
replace cmtr=.02125 if psu==1104 & year<=84
replace cmtr=.04 if psu==1104 & year==85
replace cmtr=.043125 if psu==1102
replace ctaxpd=earn1*cmtr if (psu==1214 | psu==1209 | psu==1213 | psu==1210 | psu==1104 | psu==1102)
replace ctaxpd=ys*.03 if psu==1208
replace cmtr=.03 if psu==1208
replace ctaxpd=(staxpd/2) if psu==1317
replace cmtr=.5*smtr if psu==1317
replace cmtr=.009 if ys<=2500 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.013 if ys>2500 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=22.5 if ys>2500 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=2500 if ys>2500 & ys<=5000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.017 if ys>5000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=55 if ys>5000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=5000 if ys>5000 & ys<=9000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.022 if ys>9000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=123 if ys>9000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=9000 if ys>9000 & ys<=13000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.026 if ys>13000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=211 if ys>13000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=13000 if ys>13000 & ys<=17000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.03 if ys>17000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=315 if ys>17000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=17000 if ys>17000 & ys<=21000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.035 if ys>21000 & ys<=25000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=435 if ys>21000 & ys<=25000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=21000 if ys>21000 & ys<=25000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.039 if ys>25000 & ys<=60000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=575 if ys>25000 & ys<=60000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=25000 if ys>25000 & ys<=60000 & (psu==1101 | psu==1110 | psu==1111)
replace cmtr=.043 if ys>60000 & (psu==1101 | psu==1110 | psu==1111)
replace cb=1940 if ys>60000 & (psu==1101 | psu==1110 | psu==1111)
replace clb=60000 if ys>60000 & (psu==1101 | psu==1110 | psu==1111)

replace ctaxpd=cb+(ys-clb)*cmtr if (psu==1101 | psu==1110 | psu==1111)

gen taxbill=fedtxpd+staxpd+ctaxpd+pd_fical
gen mtr=fedmtr+smtr+cmtr+m_fical

```