

## STATA CODES

### \*FIGURE I: CONSISTENCY CHECKS

\*Empirical density distribution, all firms:

```
destring Profitrate, replace
```

```
keep if Taxyear==1997
```

```
kdensity Profitrate [fweight=Weight]if Profitrate>=-0.05&Profitrate<=0.8
```

\*Empirical density distribution, all firms:

```
destring Profitrate, replace
```

```
keep if Taxyear==1998
```

```
kdensity Profitrate [fweight=Weight]if Profitrate>=-0.05&Profitrate<=0.8
```

\*Empirical density distribution, all firms:

```
destring Profitrate, replace
```

```
keep if Taxyear>=1999&Taxyear<=2003
```

```
kdensity Profitrate [fweight=Weight]if Profitrate>=-0.05&Profitrate<=0.8
```

\*Empirical density distribution, all firms:

```
destring Profitrate, replace
```

```
keep if Taxyear>=2004&Taxyear<=2009
```

```
kdensity Profitrate [fweight=Weight]if Profitrate>=-0.05&Profitrate<=0.8
```

\*Empirical density distribution, all firms:

```
destring Profitrate, replace
```

```
keep if Taxyear>=2010&Taxyear<=2011
```

```
kdensity Profitrate [fweight=Weight]if Profitrate>=-0.05&Profitrate<=0.8
```

### \*FIGURE II: BUNCHING EVIDENCE

```
destring ProfitrateTI, replace
```

keep if Taxyear==1997

\*Empirical density distribution, all firms:

kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.05&ProfitrateTI<=0.15

\*Empirical density distribution, eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold<=2

\*Empirical density distribution, non eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3&ProfitrateTI>=-0.05&ProfitrateTI<=0.15

\*Empirical density distribution, large firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=16&Taxthreshold <=17

\*Empirical density distribution, medium firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3&Taxthreshold <=15&ProfitrateTI>=-0.05&ProfitrateTI<=0.15

destring ProfitrateTI, replace

keep if Taxyear==1998

\*Empirical density distribution, all firms:

kdensity ProfitrateTI [fweight=Weight]

\*Empirical density distribution, eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold<=2

\*Empirical density distribution, non eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3

\*Empirical density distribution, large firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=16&Taxthreshold <=17

\*Empirical density distribution, medium firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3&Taxthreshold <=15

destring ProfitrateTI, replace

keep if Taxyear>=1999&Taxyear<=2003

\*Empirical density distribution, all firms:

kdensity ProfitrateTI [fweight=Weight]

\*Empirical density distribution, eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold<=2

\*Empirical density distribution, non eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3

\*Empirical density distribution, large firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=16&Taxthreshold <=17

\*Empirical density distribution, medium firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3&Taxthreshold <=15

destring ProfitrateTI, replace

keep if Taxyear>=2004&Taxyear<=2009

\*Empirical density distribution, all firms:

kdensity ProfitrateTI [fweight=Weight]

\*Empirical density distribution, eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold<=2

\*Empirical density distribution, non eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3

\*Empirical density distribution, large firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=16&Taxthreshold <=17

\*Empirical density distribution, medium firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3&Taxthreshold <=15

destring ProfitrateTI, replace

keep if Taxyear>=2010&Taxyear<=2011

\*Empirical density distribution, all firms:

kdensity ProfitrateTI [fweight=Weight]

\*Empirical density distribution, eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold<=2

\*Empirical density distribution, non eligible firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3

\*Empirical density distribution, large firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=16&Taxthreshold <=17

\*Empirical density distribution, medium firms:

kdensity ProfitrateTI [fweight=Weight] if Taxthreshold>=3&Taxthreshold <=15

\*FIGURE III: PRE-SR VS. POST-SR

destring ProfitrateTI, replace

\*1997 vs 1998, all firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997)(kdensity ProfitrateTI [fw=Weight] if Taxyear==1998, lcolor(red))

\*1997 vs 1998, eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold<2, lcolor(red))

\*1997 vs 1998, non-eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=3, lcolor(red))

\*1997 vs 1998, medium firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1997 vs 1998, large firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=16, lcolor(red))

\*1997 vs 1999/2003, all firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003, lcolor(red))

\*1997 vs 1999/2003, eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold<=2, lcolor(red))

\*1997 vs 1999/2003, non-eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3, lcolor(red))

\*1997 vs 1999/2003, medium firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1997 vs 1999/2003, large firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=16, lcolor(red))

\*1997 vs 2004/2009, all firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3, lcolor(red))

\*1997 vs 2004/2009, eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold<=2, lcolor(red))

\*1997 vs 2004/2009, non-eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3, lcolor(red))

\*1997 vs 2004/2009, medium firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1997 vs 2004/2009, large firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=16, lcolor(red))

\*1997 vs 2010/2011, all firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011, lcolor(red))

\*1997 vs 2010/2011, eligible firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold<=2, lcolor(red))
```

\*1997 vs 2010/2011, non-eligible firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3, lcolor(red))
```

\*1997 vs 2010/2011, medium firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))
```

\*1997 vs 2010/2011, large firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1997&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=16, lcolor(red))
```

#### \*FIGURE IV: IDENTIFICATION CHECKS

destring ProfitrateTI, replace

\*1998 vs 1999/2003, all firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003, lcolor(red))
```

\*1998 vs 1999/2003, eligible firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold<=2, lcolor(red))
```

\*1998 vs 1999/2003, non-eligible firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3, lcolor(red))
```

\*1998 vs 1999/2003, medium firms:

twoway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear==1998&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1998 vs 1999/2003, large firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=16)(kdensity  
ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=16, lcolor(red))

\*1998 vs 2004/2009, all firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998)(kdensity ProfitrateTI  
[fw=Weight] if Taxyear>=2004&Taxyear<=2009, lcolor(red))

\*1998 vs 2004/2009, eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold<=2)(kdensity  
ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold<=2, lcolor(red))

\*1998 vs 2004/2009, non-eligible firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=3)(kdensity  
ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3, lcolor(red))

\*1998 vs 2004/2009, medium firms:

twoway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear==1998&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1998 vs 2004/2009, large firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=16)(kdensity  
ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=16, lcolor(red))

\*1998 vs 2010/2011, all firms:

twoway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998)(kdensity ProfitrateTI  
[fw=Weight] if Taxyear>=2010&Taxyear<=2011, lcolor(red))

\*1998 vs 2010/2011, eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold<=2, lcolor(red))

\*1998 vs 2010/2011, non-eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3, lcolor(red))

\*1998 vs 2010/2011, medium firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1998 vs 2010/2011, large firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear==1998&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=16, lcolor(red))

\*1999/2003 vs 2004/2009, all firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009, lcolor(red))

\*1999/2003 vs 2004/2009, eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold<=2, lcolor(red))

\*1999/2003 vs 2004/2009, non-eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3, lcolor(red))

\*1999/2003 vs 2004/2009, medium firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3&Taxthreshold<=15, lcolor(red))

\*1999/2003 vs 2004/2009, large firms:

tway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=1999&Taxyear<=2003&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2004&Taxyear<=2009&Taxthreshold>=16, lcolor(red))

\*1999/2003 vs 2010/2011, all firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear>=1999&Taxyear<=2003)(kdensity  
ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011, lcolor(red))

\*1999/2003 vs 2010/2011, eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=1999&Taxyear<=2003&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2010&Taxyear<=2011&Taxthreshold<=2, lcolor(red))

\*1999/2003 vs 2010/2011, non-eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3, lcolor(red))

\*1999/2003 vs 2010/2011, medium firms:

tway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI  
[fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3&Taxthreshold<=15,  
lcolor(red))

\*1999/2003 vs 2010/2011, large firms:

tway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=1999&Taxyear<=2003&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2010&Taxyear<=2011&Taxthreshold>=16, lcolor(red))

\*2004/2009 vs 2010/2011, all firms:

tway (kdensity ProfitrateTI [fw=Weight] if Taxyear>=2004&Taxyear<=2009)(kdensity  
ProfitrateTI [fw=Weight] if Taxyear>=2010&Taxyear<=2011, lcolor(red))

\*2004/2009 vs 2010/2011, eligible firms:

tway (kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2004&Taxyear<=2009&Taxthreshold<=2)(kdensity ProfitrateTI [fw=Weight] if  
Taxyear>=2010&Taxyear<=2011&Taxthreshold<=2, lcolor(red))

\*2004/2009 vs 2010/2011, non-eligible firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if
Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3)(kdensity ProfitrateTI [fw=Weight] if
Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3, lcolor(red))
```

\*2004/2009 vs 2010/2011, medium firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if
Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3&Taxthreshold<=15)(kdensity ProfitrateTI
[fw=Weight] if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3&Taxthreshold<=15,
lcolor(red))
```

\*2004/2009 vs 2010/2011, large firms:

```
twoway (kdensity ProfitrateTI [fw=Weight] if
Taxyear>=2004&Taxyear<=2009&Taxthreshold>=16)(kdensity ProfitrateTI [fw=Weight] if
Taxyear>=2010&Taxyear<=2011&Taxthreshold>=16, lcolor(red))
```

\*FIGURE V: BUNCHING ESTIMATION

\*1997: All firms, middle band: [0.06-0.08], kink=0.07, q=3

```
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
```

```
destring ProfitrateTI, replace
```

```
keep if Taxyear==1997
```

\*Empirical density distribution:

```
kdensity ProfitrateTI [fweight=Weight]
```

\*Bunching window:

```
gen kink=(ProfitrateTI>=0.06 & ProfitrateTI<=0.08)
```

\*Dummies:

```
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
```

\*Regression dj:

```
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons
```

```
predict resid, r
```

\*Counterfactual density distribution d^j:

```
gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)
```

\*Graph:

```
twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.03, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=0&predicted_weight>=0, sort yaxis(2)
```

\*Excess mass:

```
gen dif = Weight - predicted_weight
```

```
gen inkink = (kink!=0)
```

```
by inkink, sort: egen excess_mass = sum(dif)
```

\*Empirical bunching estimate:

```
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
```

```
gen denominator = sum_predicted_weight / (0.08-0.06+1)
```

```
gen bunch=excess_mass if inkink==1
```

```
gen b=bunch/denominator
```

\*1997: Non eligible firms, middle band: [0.058-0.078], kink=0.068, q=2

```
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
```

```
destring ProfitrateTI, replace
```

```
keep if Taxyear==1997&Taxthreshold>=3
```

\*Empirical density distribution:

```
kdensity ProfitrateTI [fweight=Weight]
```

\*Bunching window:

```
gen kink=(ProfitrateTI>=0.058 & ProfitrateTI<=0.078)
```

\*Dummies:

```
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
```

\*Regression dj:

```
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI i.kink, nocons
```

```
predict resid, r
```

\*Counterfactual density distribution d^j:

```
gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)
```

\*Graph:

```
twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.03, yaxis(1) || line  
predicted_weight ProfitrateTI if ProfitrateTI>=-0.03&predicted_weight>=0, sort yaxis(2)
```

\*Excess mass:

```
gen dif = Weight - predicted_weight
```

```
gen inkink = (kink!=0)
```

```
by inkink, sort: egen excess_mass = sum(dif)
```

\*Empirical bunching estimate:

```
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
```

```
gen denominator = sum_predicted_weight / (0.078-0.058+1)
```

```
gen bunch=excess_mass if inkink==1
```

```
gen b=bunch/denominator
```

\*1997: Middle firms, middle band: [0.065-0.075], kink=0.07, q=3

```
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
```

```
destring ProfitrateTI, replace
```

```
keep if Taxyear==1997&Taxthreshold>=3&Taxthreshold<=15
```

\*Empirical density distribution:

```
kdensity ProfitrateTI [fweight=Weight]
```

\*Bunching window:

```
gen kink=(ProfitrateTI>=0.065 & ProfitrateTI<=0.075)
```

\*Dummies:

```
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
```

\*Regression dj:

```
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI  
i.kink, nocons
```

```
predict resid, r
```

\*Counterfactual density distribution d^j:

```
gen
```

```
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI  
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit  
rateTI)
```

\*Graph:

```

twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.07, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.07, sort yaxis(2)

*Excess mass:

gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.075-0.065+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*1998: All firms, middle band: [0.06-0.08], kink=0.07, q=3

import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear

destring ProfitrateTI, replace

keep if Taxyear==1998

*Empirical density distribution:

kdensity ProfitrateTI [fweight=Weight]

*Bunching window:

gen kink=(ProfitrateTI>=0.06 & ProfitrateTI<=0.08)

*Dummies:

replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:

reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:

gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:

twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.03, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=0&predicted_weight>=0, sort yaxis(2)

```

\*Excess mass:

```
gen dif = Weight - predicted_weight
```

```
gen inkink = (kink!=0)
```

```
by inkink, sort: egen excess_mass = sum(dif)
```

\*Empirical bunching estimate:

```
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
```

```
gen denominator = sum_predicted_weight / (0.08-0.06+1)
```

```
gen bunch=excess_mass if inkink==1
```

```
gen b=bunch/denominator
```

\*1998: Medium firms, all band: [0.061-0.081], kink=0.071, q=3

```
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
```

```
destring ProfitrateTI, replace
```

```
keep if Taxyear==1998&Taxthreshold>=3&Taxthreshold<=15
```

\*Empirical density distribution:

```
kdensity ProfitrateTI [fweight=Weight]
```

\*Bunching window:

```
gen kink=(ProfitrateTI>=0.061 & ProfitrateTI<=0.081)
```

\*Dummies:

```
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
```

\*Regression dj:

```
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI  
i.kink, nocons
```

```
predict resid, r
```

\*Counterfactual density distribution d^j:

```
gen
```

```
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI  
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit  
rateTI)
```

\*Graph:

```
twoway kdensity ProfitrateTI [fweight=Weight], yaxis(1) || line predicted_weight ProfitrateTI,  
sort yaxis(2)
```

\*Excess mass:

```

gen dif = Weight - predicted_weight
gen inkink = (kink!=0)
by inkink, sort: egen excess_mass = sum(dif)
*Empirical bunching estimate:
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
gen denominator = sum_predicted_weight / (0.081-0.061+1)
gen bunch=excess_mass if inkink==1
gen b=bunch/denominator

*1998: Non eligible firms,middle band: [0.061-0.081], kink=0.071, q=2
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
destring ProfitrateTI, replace
keep if Taxyear==1998&Taxthreshold>=3
*Empirical density distribution:
kdensity ProfitrateTI [fweight=Weight]
*Bunching window:
gen kink=(ProfitrateTI>=0.061 & ProfitrateTI<=0.081)
*Dummies:
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
*Regression dj:
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI i.kink, nocons
predict resid, r
*Counterfactual density distribution d^j:
gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)
*Graph:
tway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.03, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=0&predicted_weight>=0, sort yaxis(2)
*Excess mass:
gen dif = Weight - predicted_weight
gen inkink = (kink!=0)

```

```

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.081-0.061+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*1999/2003: All firms,middle band: [0.055-0.095], kink=0.075, q=2

import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear

destring ProfitrateTI, replace

keep if Taxyear>=1999&Taxyear<=2003

*Empirical density distribution:

kdensity ProfitrateTI [fweight=Weight]

*Bunching window:

gen kink=(ProfitrateTI>=0.055 & ProfitrateTI<=0.095)

*Dummies:

replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:

reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:

gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)

*Graph:

twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.5, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.5&predicted_weight>=-0.5, sort yaxis(2)

*Excess mass:

gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

```

```

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.095-0.055+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*1999/2003: Medium firms,middle band: [0.067-0.088], kink=0.077, q=3

import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear

destring ProfitrateTI, replace

keep if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3&Taxthreshold<=15

*Empirical density distribution:

kdensity ProfitrateTI [fweight=Weight]

*Bunching window:

gen kink=(ProfitrateTI>=0.067 & ProfitrateTI<=0.088)

*Dummies:

replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:

reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:

gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:

twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.3, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.3&predicted_weight>=-0.3, sort yaxis(2)

*Excess mass:

gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

```

```

gen denominator = sum_predicted_weight / (0.088-0.067+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*1999/2003: Non eligible firms, middle band: [0.045-0.085], kink=0.065, q=3
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
destring ProfitrateTI, replace

keep if Taxyear>=1999&Taxyear<=2003&Taxthreshold>=3

*Empirical density distribution:
kdensity ProfitrateTI [fweight=Weight]

*Bunching window:
gen kink=(ProfitrateTI>=0.045 & ProfitrateTI<=0.085)

*Dummies:
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:
gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:
twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.5, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.5&predicted_weight>=-0.5, sort yaxis(2)

*Excess mass:
gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.085-0.045+1)

```

```

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*2004/2009: All firms,middle band: [0.08-0.10], kink=0.09, q=3
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
destring ProfitrateTI, replace
keep if Taxyear>=2004&Taxyear<=2009
*Empirical density distribution:
kdensity ProfitrateTI [fweight=Weight]

*Bunching window:
gen kink=(ProfitrateTI>=0.08 & ProfitrateTI<=0.10)

*Dummies:
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons
predict resid, r

*Counterfactual density distribution d^j:
gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:
twayway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.2, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.2&predicted_weight>=-0.2, sort yaxis(2)

*Excess mass:
gen dif = Weight - predicted_weight
gen inkink = (kink!=0)
by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
gen denominator = sum_predicted_weight / (0.10-0.08+1)
gen bunch=excess_mass if inkink==1

```

```
gen b=bunch/denominator
```

```
*2004/2009: Medium firms,middle band: [0.09-0.11], kink=0.1, q=3
```

```
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
```

```
destring ProfitrateTI, replace
```

```
keep if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3&Taxthreshold<=15
```

```
*Empirical density distribution:
```

```
kdensity ProfitrateTI [fweight=Weight]
```

```
*Bunching window:
```

```
gen kink=(ProfitrateTI>=0.09 & ProfitrateTI<=0.11)
```

```
*Dummies:
```

```
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
```

```
*Regression dj:
```

```
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI  
i.kink, nocons
```

```
predict resid, r
```

```
*Counterfactual density distribution d^j:
```

```
gen
```

```
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI  
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit  
rateTI)
```

```
*Graph:
```

```
twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.2, yaxis(1) || line  
predicted_weight ProfitrateTI if ProfitrateTI>=-0.2&predicted_weight>=-0.2, sort yaxis(2)
```

```
*Excess mass:
```

```
gen dif = Weight - predicted_weight
```

```
gen inkink = (kink!=0)
```

```
by inkink, sort: egen excess_mass = sum(dif)
```

```
*Empirical bunching estimate:
```

```
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
```

```
gen denominator = sum_predicted_weight / (0.11-0.09+1)
```

```
gen bunch=excess_mass if inkink==1
```

```
gen b=bunch/denominator
```

```

*2004/2009: Non eligible firms,all band: [0.07-0.11], kink=0.09, q=3
import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear
destring ProfitrateTI, replace
keep if Taxyear>=2004&Taxyear<=2009&Taxthreshold>=3
*Empirical density distribution:
kdensity ProfitrateTI [fweight=Weight]
*Bunching window:
gen kink=(ProfitrateTI>=0.07 & ProfitrateTI<=0.11)
*Dummies:
replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0
*Regression dj:
reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons
predict resid, r
*Counterfactual density distribution d^j:
gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)
*Graph:
tway kdensity ProfitrateTI [fweight=Weight], yaxis(1) || line predicted_weight ProfitrateTI,
sort yaxis(2)
*Excess mass:
gen dif = Weight - predicted_weight
gen inkink = (kink!=0)
by inkink, sort: egen excess_mass = sum(dif)
*Empirical bunching estimate:
by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)
gen denominator = sum_predicted_weight / (0.11-0.07+1)
gen bunch=excess_mass if inkink==1
gen b=bunch/denominator

```

```

*2010/2011: All firms,middle band: [0.08-0.12], kink=0.1, q=3

import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear

destring ProfitrateTI, replace

keep if Taxyear>=2010&Taxyear<=2011

*Empirical density distribution:

kdensity ProfitrateTI [fweight=Weight]

*Bunching window:

gen kink=(ProfitrateTI>=0.08 & ProfitrateTI<=0.12)

*Dummies:

replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:

reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:

gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:

tway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.4, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.4&predicted_weight>=-0.4, sort yaxis(2)

*Excess mass:

gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.12-0.08+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*2010/2011: Medium firms,middle band: [0.08-0.1], kink=0.09, q=3

```

```

import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear

destring ProfitrateTI, replace

keep if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3&Taxthreshold<=15

*Empirical density distribution:

kdensity ProfitrateTI [fweight=Weight]

*Bunching window:

gen kink=(ProfitrateTI>=0.08 & ProfitrateTI<=0.1)

*Dummies:

replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:

reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:

gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:

tway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.3, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.3&predicted_weight>=-0.3, sort yaxis(2)

*Excess mass:

gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.1-0.08+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

*2010/2011: Non eligible firms, middle band: [0.083-0.103], kink=0.093, q=3

import excel "Empirical vs counterfactual .xlsx", firstrow sheet("All") clear

```

```

destring ProfitrateTI, replace

keep if Taxyear>=2010&Taxyear<=2011&Taxthreshold>=3

*Empirical density distribution:

kdensity ProfitrateTI [fweight=Weight]

*Bunching window:

gen kink=(ProfitrateTI>=0.083 & ProfitrateTI<=0.103)

*Dummies:

replace kink=kink+kink[_n-1] if kink[_n-1]!=. & kink!=0

*Regression dj:

reg Weight ProfitrateTI c.ProfitrateTI#c.ProfitrateTI c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI
i.kink, nocons

predict resid, r

*Counterfactual density distribution d^j:

gen
predicted_weight=_b[ProfitrateTI]*ProfitrateTI+_b[c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI
*ProfitrateTI)+_b[c.ProfitrateTI#c.ProfitrateTI#c.ProfitrateTI]*(ProfitrateTI*ProfitrateTI*Profit
rateTI)

*Graph:

twoway kdensity ProfitrateTI [fweight=Weight] if ProfitrateTI>=-0.2, yaxis(1) || line
predicted_weight ProfitrateTI if ProfitrateTI>=-0.2&predicted_weight>=-0.2, sort yaxis(2)

*Excess mass:

gen dif = Weight - predicted_weight

gen inkink = (kink!=0)

by inkink, sort: egen excess_mass = sum(dif)

*Empirical bunching estimate:

by inkink, sort: egen sum_predicted_weight = sum(predicted_weight)

gen denominator = sum_predicted_weight / (0.103-0.083+1)

gen bunch=excess_mass if inkink==1

gen b=bunch/denominator

```