命令

政策有效性检验

```
gen tt=time*treat
reg so2    tt labour kx xf fdi gdzc i.year i.province,cluster(province)
reg gygdp    tt labour kx xf fdi gdzc i.year i.province,cluster(province)
reg so2    tt labour kx xf fdi gdzc i.year i.city,cluster(city)
reg gygdp    tt labour kx xf fdi gdzc i.year i.city,cluster(city)
```

基准回归

```
xtset company year
gen lnzjz=ln(zjz+1)
gen lnlabor=ln(labor+1)
gen lnzjtr=ln(zjtr+1)
gen lncapital=ln(capital1+1)
levpet lnzjz, free(lnlabor) proxy(lnzjtr) capital(lncapital)
.predict tfp,omega
.gen lntfp=ln(tfp)

gen tt=time*treat
gen lnzc=ln(zc+1)
gen lnzlb=ln(zlb+1)
gen lnaj=ln(aj+1)
gen lnlabor=ln(labor+1)

gen ttt=tt*so2
gen times=time*so2
gen treats=treat*so2
gen tf1=tf*time
gen tf2=tf1*tf1
gen lnrev=ln(revenue+1)

gen tt1=treat*year04
gen tt2=treat*year05
gen tt3=treat*year06
gen tt5=treat*year08
gen tt6=treat*year09
gen tt7=treat*year10
gen tt8=treat*year11
gen tt9=treat*year12
gen tt10=treat*year13
gen tt11=treat*year14
gen tt12=treat*year15
```

```
reg lntfp    tt i.year i.area i.ind if so2==1,cluster(area)
reg lntfp    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.area i.ind if so2==1,cluster(area)
xtreg lntfp    tt    i.year i.company if so2==1,cluster(area)
xtreg lntfp    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.company if so2==1,cluster(area)
```

动态效应

```
reg lntfp    tt1 tt2 tt3    tt5 tt6 tt7 tt8 tt9 tt10 tt11 tt12 zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.area i.ind if so2==1,cluster(area) level(90)
xtreg lntfp    tt1 tt2 tt3    tt5 tt6 tt7 tt8 tt9 tt10 tt11 tt12    zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.company if so2==1,cluster(area) level(90)

twoway connected tfp year,ytitle("Annual treatment effect")    yscale(range(-0.1 0.6)) ylabel(-0.1(0.1)0.6) mcolor(black)    lcolor(black) || connected tfpd year,msymbol(o) mcolor(black)    lpattern(dash) lcolor(black) || connected tfpu year,msymbol(o) mcolor(black) lpattern(dash) lcolor(black)||,ysc(r(-0.1 0.6) titleg(0.1)) xsc(r(2008 2014.5) titleg(5)) xlabel(2008(1) 2015) ylabel(-0.1(0.1) 0.6) ||connected var14 year, msymbol(i) mcolor(black) lpattern(dash) lcolor(black)    xtitle("") title("A. Annual treatment effect of TFP" ,position(12) )    legend(label(1 "coef") label(2 "90%CI") order(1 2))
```

工具变量

```
ivregress 2sls lntfp (tt=tf1) zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.area i.ind if so2==1,cluster(area)
xtivreg lntfp (tt=tf1) zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.company if so2==1,
```

三重差分

```
reg lntfp ttt tt treats times so2    i.year i.area i.ind ,cluster(area)
reg lntfp ttt tt treats times so2 zcsy lf owner    age sczy lnaj lnlabor lnzlb i.year i.area i.ind ,cluster(area)
xtreg lntfp ttt tt treats times so2    i.year i.company,cluster(area)
xtreg lntfp ttt tt treats times so2 zcsy lf owner    age sczy lnaj lnlabor lnzlb i.year i.company,cluster(area)
```

安慰剂检验

```
twoway (kdensity estimate) (scatter pvalue estimate, ytitle(p-value) xtitle(estimates)xscale(titlegap(2)outergap(0)) graphregion(margin(l-2 r-0 t-3 b-3)) legend( label (1 "kdensity of estimates") label ( 2 "p value"))),yline(0.1) xline(0.090,lpattern(line)) xlabel(-0.1 -0.05 0 0.05 0.090 0.1) clegend(on bexpand)
```

异质性检验

```
reg lntfp    tt i.year i.area i.ind if so2==1&dzbq==0,cluster(area)
reg lntfp    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.area i.ind if
so2==1&dzbq==0,cluster(area)
xtreg lntfp    tt    i.year i.company if so2==1&dzbq==0,cluster(area)
xtreg lntfp    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.company if
so2==1&dzbq==0,cluster(area)

xtreg lntfp    tt zcsy lf      age    sczy lnaj lnlabor lnzlb i.year i.company if
so2==1&owner==0,cluster(area)
xtreg lntfp    tt zcsy lf      age    sczy lnaj lnlabor lnzlb i.year i.company if
so2==1&owner==1,cluster(area)
xtreg lntfp    tt zcsy lf      age    sczy owner lnlabor lnzlb i.year i.company if
so2==1&ajj==0,cluster(area)
xtreg lntfp    tt zcsy lf      age    sczy owner lnlabor lnzlb i.year i.company if
so2==1&ajj==1,cluster(area)
```

传导机制

```
gen ttroa=tt*roa
reg zlb tt zcsy zc    lf    iso lnlabor    xfs sch i.year i.area i.ind if so2==1,cluster(area)
xtreg zlb tt zcsy zc    lf    iso lnlabor    xfs sch i.year i.company    if
so2==1,cluster(area)
reg lntfp    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.area i.ind if
so2==1,cluster(area)
xtreg lntfp    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.company if
so2==1,cluster(area)
reg tz ttroa roa tt age zlb lf sczy iso i.year i.area i.ind if so2==1,cluster(area)
xtreg tz ttroa roa tt age zlb lf sczy iso i.year i.company if so2==1,cluster(area)
```

GMM 测算全要素生产率

```
xtivreg2 lnzjz lnlabor    (lncapital= l.lncapital) ,gmm2s fe robust
gen lntfp1=lnzjz-0.3324*lnlabor-0.5646*lncapital

reg lntfp1    tt i.year i.area i.ind if so2==1,cluster(area)
reg lntfp1    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.area i.ind if
so2==1,cluster(area)
xtreg lntfp1    tt    i.year i.company if so2==1,cluster(area)
xtreg lntfp1    tt zcsy lf      age owner sczy lnaj lnlabor lnzlb i.year i.company if
so2==1,cluster(area)
```