

附 录

正文未报告部分

一、全要素生产率的估计

```

ta year,gen(year)
gen ddq=substr(dq,1,2)
ta ddq,gen(ddqq)
opreg lny, exit(exit) state(lnkn) proxy(lninv) free(lnlab lnm year2-year10 ddqq2-ddqq32)
vce(bootstrap,reps(2))
xtreg lny lnkn lnlab lnm year2-year10 ddqq2-ddqq32,fe
gen tfp=exp(lny-alpha*lnkn-beta*lnlab-gamma*lnm)

```

二、全要素生产率与要素投入的相关性分析

```

twoway (scatter lnkn lntfp if year==2007) (lfit lnkn lntfp if year==2007),graphregion(fcolor(white))
legend(off) ylabel(,nogrid) xtitle("全要素生产率") ytitle("资本投入")
twoway (scatter lnlab lntfp if year==2007) (lfit lnlab lntfp if year==2007),graphregion(fcolor(white))
legend(off) ylabel(,nogrid) xtitle("全要素生产率") ytitle("劳动投入")

```

三、TFP 损失的估计

1.TFP 损失

```

gen taok=alpha*2*y/(rkn*3)
gen taol=beta*2*y/(ww*3)
gen taom=gamma*2*y/(m*3)
bysort cici: egen ys=total(y)
bysort cici: gen theta=y/ys
gen ttk=theta/taok
gen ttl=theta/taol
gen ttm=theta/taom
bysort cici: egen sttk=total(ttk)
bysort cici: egen sttl=total(ttl)
bysort cici: egen sttm=total(ttm)
bysort cici: gen tfprs=(sttk^(-alpha))*(sttl^(-beta))*(sttm^(-gamma))
gen tfpr=(taok^alpha)*(taol^beta)*(taom^gamma)
gen bi=(tfp*tfprs/(tfps*tfpr))^ts
bysort cici: egen bbi=total(bi)
egen yall=total(y)
gen ttheta=ys/yall
gen gg=ttheta*ln(bbi)/ts

```

```

egen tcici=tag(cici)
egen ee=total(gg) if tcici==1
gen e=1-exp(ee)
su e

```

2.资本扭曲损失

```

gen taok=alpha*2*y/(rkn*3)
gen taol=beta*2*y/(ww*3)
gen taom=gamma*2*y/(m*3)
bysort cici: egen ys=total(y)
bysort cici: gen theta=y/ys
gen ttk=theta/taok
gen ttl=theta/taol
gen ttm=theta/taom
bysort cici: egen sttk=total(ttk)
bysort cici: egen sttl=total(ttl)
bysort cici: egen sttm=total(ttm)
bysort cici: gen tfprs=(sttk^(-alpha))*(sttl^(-beta))*(sttm^(-gamma))
gen tfpr=(taok^alpha)*(taol^beta)*(taom^gamma)
gen mk=tfp*((taom*sttm)^(-gamma))*((taol*sttl)^(-beta))
gen mkc=mk^ts
egen tmkc=total(mkc)
gen tfpsk=tmkc^(1/ts)
gen bik=(tfp*tfprs/(tfpsk*tfpr))^ts
bysort cici: egen bbik=total(bik)
egen yall=total(y)
gen ttheta=ys/yall
gen ggk=ttheta*ln(bbik)/ts
egen tcici=tag(cici)
egen eek=total(ggk) if tcici==1
gen ek=1-exp(eek)
su ek

```

3.劳动扭曲损失

```

gen taok=alpha*2*y/(rkn*3)
gen taol=beta*2*y/(ww*3)
gen taom=gamma*2*y/(m*3)
bysort cici: egen ys=total(y)

```

```

bysort cici: gen theta=y/ys
gen ttk=theta/taok
gen ttl=theta/taol
gen ttm=theta/taom
bysort cici: egen sttk=total(ttk)
bysort cici: egen sttl=total(ttl)
bysort cici: egen sttm=total(ttm)
bysort cici: gen tfprs=(sttk^(-alpha))*(sttl^(-beta))*(sttm^(-gamma))
gen tfpr=(taok^alpha)*(taol^beta)*(taom^gamma)
gen ml=tfp*((taom*sttm)^(-gamma))*((taok*sttk)^(-alpha))
gen mlc=ml^ts
egen tmlc=total(mlc)
gen tfpsl=tmlc^(1/ts)
gen bil=(tfp*tfprs/(tfpsl*tfpr))^ts
bysort cici: egen bbil=total(bil)
egen yall=total(y)
gen ttheta=ys/yall
gen ggl=ttheta*ln(bbil)/ts
egen tcici=tag(cici)
egen eel=total(ggl) if tcici==1
gen el=1-exp(eel)
su el

```

4.中间投入品扭曲损失

```

gen taok=alpha*2*y/(rkn*3)
gen taol=beta*2*y/(ww*3)
gen taom=gamma*2*y/(m*3)
bysort cici: egen ys=total(y)
bysort cici: gen theta=y/ys
gen ttk=theta/taok
gen ttl=theta/taol
gen ttm=theta/taom
bysort cici: egen sttk=total(ttk)
bysort cici: egen sttl=total(ttl)
bysort cici: egen sttm=total(ttm)
bysort cici: gen tfprs=(sttk^(-alpha))*(sttl^(-beta))*(sttm^(-gamma))
gen tfpr=(taok^alpha)*(taol^beta)*(taom^gamma)
gen mm=tfp*((taol*sttl)^(-beta))*((taok*sttk)^(-alpha))

```

```

gen mmc=mm^ts
egen tmmc=total(mmc)
gen tfpsm=tmmc^(1/ts)
gen bim=(tfp*tfprs/(tfpsm*tfpr))^ts
bysort cici: egen bbim=total(bim)
egen yall=total(y)
gen ttheta=ys/yall
gen ggm=ttheta*ln(bbim)/ts
egen tcici=tag(cici)
egen eem=total(ggm) if tcici==1
gen em=1-exp(eem)
su em

```

四、资源错配的实证研究

```

reg mis mj fin lab czbt,r
est store ols
reg mis mj fin lab czbt edu import trans,r
est store ols2
xtset ddq year
xtreg mis mj fin lab czbt ,fe
est store fe
xtreg mis mj fin lab czbt edu import trans,fe
est store fe2
ivregress 2sls mis mj fin lab edu import trans (czbt=L1.czbt L2.czbt)
est store sls
ivregress gmm mis mj fin lab edu import trans (czbt=L1.czbt L2.czbt)
est store gmm
esttab ols ols2 fe fe2 sls gmm, b(%6.3f) se star(* 0.1 ** 0.05 *** 0.01) mtitle scalar(r2 r2_a N )
compress nogaps

```

五、区域异质性

```

drop if ddq == 54
gen group = 2
replace group = 1 if ddq==61 | ddq==62 | ddq==64 | ddq==63 | ddq==65 | ddq==50 | ddq==45 |
ddq==15 | ddq==51 | ddq==52 | ddq==53
replace group = 3 if ddq==11 | ddq==12 | ddq==13 | ddq==31 | ddq==32 | ddq==33 | ddq==35 |
ddq==37 | ddq==44 | ddq==46
replace group = 4 if ddq==21 | ddq==22 | ddq==23

```

```

label define group_lab 1 "西部" 2 "中部" 3 "东部" 4 "东北"
label value group group_lab
xtreg mis mj fin lab czbt edu import trans if group==1,fe
est store west
xtreg mis mj fin lab czbt edu import trans if group==2,fe
est store middle
xtreg mis mj fin lab czbt edu import trans if group==3,fe
est store east
xtreg mis mj fin lab czbt edu import trans if group==4,fe
est store east2
esttab east2 east middle west, b(%6.3f) star(* 0.1 ** 0.05 *** 0.01) mtitle scalar(r2 r2_a N )
compress nogaps

```

六、动态异质性

```

gen time = 1
replace time = 2 if year>2002
drop if year>2007
xtreg mis mj fin lab czbt edu import trans if time==1,fe
est store before
xtreg mis mj fin lab czbt edu import trans if time==2,fe
est store after
esttab before after, b(%6.3f) star(* 0.1 ** 0.05 *** 0.01) mtitle scalar(r2 r2_a N ) compress nogaps

```

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参考文献引用范例:

[1] 朱军. 技术吸收、政府推动与中国全要素生产率提升[J]. 中国工业经济. 2017,(1):5-24.

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