```
//This script performs the HCA max R2 regressions.
//Copyleft Ed Egan, 2022

//Open the data
insheet using "MasterCBSALayersv20-7.txt"
set more off
log using HCA-7-0.log, replace

//First build the id
egen cbsaid=group(cbsa)

//Remove MICRO-SAs (Lebanon, NH-VT, cbsaid=40)
drop if cbsa=="Lebanon, NH-VT"

//New Vars
egen cbsalayerid=group(cbsa layer)
sort cbsalayerid year
xtset cbsalayerid year
gen growthinv20=growthinv*inflator20
gen growthinvcluster20=growthinvcluster*inflator20
gen growthinv20f = f.growthinv20
gen growthinv20l=ln(1+growthinv20)
gen growthinv20lf = f.growthinv20l
gen nosinglemulti=nosingleton+nomultiton
gen totsinglemulticount=totmultitoncount+nosingleton
gen vcr2eligible=0
replace vcr2eligible=1 if lowesthighestflag==1 & year>=2002
gen fracinhulls = tothullcount/numstartups
gen growthinv20diff=f.growthinv20-growthinv20
gen avghulldistkm=avghulldisthm/10
gen avghulldensityl=ln(avghulldensity)
gen tothulldensityl=ln(tothulldensity)
gen avghullareal=ln(avghullarea)
gen numstartupsl=ln(numstartups)

//Run the hull count regressions
drop vcr2eligible
gen vcr2eligible=0
replace vcr2eligible=1 if lowesthighestflag==1 & year>=1995

capture drop vcr2result
capture drop vcn
gen vcr2result=.
gen vcn=.
forvalues cbsaid=1/89 {
        quietly capture su maxnumclusters if cbsaid==`cbsaid' &
        vcr2eligible==1
        capture local fl=`r(max)'
        if _rc==0 {
                forvalues clusters=1/`fl' {
                        quietly capture reg growthinv20 fracinhulls
                        tothullcount avghullarea tothulldensity avghulldisthm
                        if cbsaid==`cbsaid' & numclusters==`clusters' &
                        vcr2eligible==1, robust
                        display `cbsaid' "#" `clusters' "#" `e(N)' "#" `e(r2)'
                        capture replace vcr2result=`e(r2)' if cbsaid==`cbsaid'
                        & numclusters==`clusters'  & vcr2eligible==1
                        capture replace vcn=`e(N)' if cbsaid==`cbsaid' &
                        numclusters==`clusters'  & vcr2eligible==1
                }
        }
}

//Record the results
```

```
capture drop vcr2inc
capture drop maxvcr2inc
capture drop chosenhullscount
capture drop chosenhullslayer
gen vcr2inc=vcr2result
replace vcr2inc=. if vcn<15
bysort cbsaid: egen maxvcr2inc=max(vcr2inc)
bysort cbsaid: egen chosenhullscount=min(numclusters) if maxvcr2inc==vcr2inc &
vcr2inc !=.
gen chosenhullslayer=.
replace chosenhullslayer=layer if chosenhullscount <.
export delimited cbsa year layer chosenhullscount if chosenhullslayer==layer
using "ChosenHullCBSALayers.txt", delimiter(tab) nolabel replace
```