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Stata code to reproduce analyses presented in "Adminsitrative Grouping and Eqaulity

Public Service provision". Journal of Public Administration Research and Theory

Stata version 15

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\*MEASURES

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/\*

instnr: school identifier

cohort: school grade level identifier

class: class identifier

spc\_pupil: dummy variable, takes the value 1 if student recieves special education

spc\_magnitude: amount of speciel education received in hours

test: standardized testscore

test\_class\_std: standardized class room average

immigrant: dummy variable, takes the value 1 if student is an immigrant or decendant of immigrants

psych\_diag: dummy variable, takes the value 1 if student has a psychiatric diagnosis

edu\_parents: parental education in years

birth order: birth order indicator, takes the value 1 if the child is the oldest

x\_lmo: class room leave me out mean

grade: grade level indicator

class\_number: number of classes at school grade level

class\_size: number of students in class

class\_test\_size: number of students in class who have taken the test

\*/

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\*SAMPLE

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/\*Exclude special education class rooms, exclude implausible class sizes, exclude

classes where more than 3 students have not taken the national test, include

only grade levels that take the national test \*/

keep if class\_spc\_all\_share <0.8 & class\_size > 4 & class\_size < 31 ///

 & class\_size-class\_test\_size <=3 & inlist(grade\_,3,4,5,6,7,8,9)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*RANDOMIZATION CHECKS

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preserve

bys class: gen x =\_n

keep if x ==1 & class\_number >1

\*Classroom deviation from cohort

foreach var in boy immigrant psych\_diag edu\_parents {

 gen `var'\_cohort\_lmo =.

 levelsof cohort if class\_number >1, local(levels)

 foreach c of local levels {

 levelsof class if cohort ==`c', local(class)

 foreach 1 of local class {

 qui sum `var' if cohort ==`c' & class !=`1'

 replace `v'\_cohort\_lmo = r(mean) if cohort ==`c' & class ==`1'

}

}

 bys class: gen class\_cohort\_diff\_`var' = `var'\_class\_avg - `var'\_cohort\_lmo

 hist class\_cohort\_diff\_`var'

}

\*Chi2 and Kruskow Wallis

foreach var in immigrant boy psych\_diag {

 gen `var'\_chi\_p =.

 levelsof cohort, local(levels)

 foreach 1 of local levels {

 qui tab `var' class if cohort ==`1', chi

 replace `var'\_chi\_p = r(p) if cohort ==`1'

 }

}

gen edu\_parents\_kwallis =.

levelsof cohort, local(levels)

foreach 1 of local levels {

 qui kwallis edu\_parents if cohort ==`1', by(class)

 replace `var'\_kwallis = (1-chi2(r(df),r(chi2\_adj))) if cohort ==`1'

}

bys cohort: gen y = \_n

foreach var in immigrant boy psych\_diag {

 hist `var'\_chi\_p if y ==1

}

hist edu\_parents\_kwallis if y ==1

\*Analysis of variance

egen test\_total = mean(test\_class\_std)

bys cohort: egen test\_cohort =mean(test\_class\_std)

sst:(test\_class\_std -test\_total)^2

gen test\_ssw = (test\_class\_std - test\_cohort)^2

gen test\_ssb = (test\_cohort-test\_total)^2

sum test\_avg\_total test\_sst test\_ssw test\_ssb

restore

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*ANALYSES

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

global control "edu\_parents\_std boy immigrant psych\_diag i.grade immigrant\_lmo\_std boy\_lmo\_std psych\_diag\_lmo\_std edu\_parents\_lmo\_std"

xtset instnr

\*Table 3

eststo model\_1: xtreg spc\_pupil test\_class\_std test i.grade , fe robust

eststo model\_2: xtreg spc\_pupil test\_class\_std test $control , fe robust

eststo model\_3: xtreg spc\_pupil c.test\_class\_std##c.test $control, fe robust

\*Table 4

eststo model\_1: xtreg spc\_magnitude test\_class\_std test $control, fe robust

eststo model\_2: xtreg spc\_magnitude test\_class\_std test $control if spc\_pupil ==1, fe robust

\*Table 5

eststo model\_1: xtreg spc\_pupil test\_class\_std test class\_size\_std $control, fe robust

eststo model\_2: xtreg spc\_pupil test\_class\_std test $control if grade ==3, fe robust

eststo model\_3: xtreg spc\_pupil test\_class\_std test $control if grade ==3 & birth\_order==1 , fe robust

\*Table A1

xtreg spc\_pupil test\_class\_std test $control if cohort\_size == cohort\_test\_size, fe robust

\*Table A2

xtlogit spc\_pupil test\_class\_std test $control, fe

\*Table A3

xtreg spc\_pupil test\_class\_std test $control if e(sample), fe robust