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*Boys and girls learning in 6 Southeast countries*
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*Outputs generated with REPEST Stata module
*
*Avvisati, F. and Kelsair, F. (2014). REPEST: Stata module to run estimations with
weighted*
*replicate samples and plausible values. Statistical Software Components S457918,
Boston *
*College Department of Economics.
*
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ssc install repeat, replace
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*Area 1*
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* Area 1 - Example of Stata command (reading scale only) for output data

* 1.1 Comparison of percentage of boys and girls in Grade 5 below/above lower
primary international threshold reference:
* SEA-PLM 2019 reading - SDG 4.1.1a threshold = Band 2 and below / Bands 3 and above

* SEA-PLM 2019 mathematics - SDG 4.1.1a threshold = Band 3 and below / Bands 4 and
above
* SEA-PLM 2019 writing scale - cut point reference by Authors = Band 1 and below /
Bands 2 and above

* command to be computed on the SEA-PLM 2019 student dataset - example given only
for reading outputs

* new dichotomous variable creation for below and above lower primary international
reference threshold on reading scale only

foreach v of varlist pvlread1-pvlread5 {
    gen _`v'=1 if `v'<=2
}

foreach v of varlist pvlread1-pvlread5 {
    replace _`v'=0 if `v'>2
}

* computation of percentage estimate of boys and girls below and above cut point and
statistic difference test between the two groups
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repeat SVY, estimate(freq _pvlread@) over(Gender,test) by(cnt) outfile (g1)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

* export output data to excel

use g1,clear
export excel using g1.xls, first(var)

* 1.2 Comparaison of percentage of boys and girls in Grade 5 below/above end
primary international thereshold reference:
* SEA-PLM 2019 reading - SDG 4.1.1b threshold = Bands 5 and below / Band 6 and above

* SEA-PLM 2019 mathematics - SDG 4.1.1b threshold = Bands 5 and below / Band 6 and
above
* SEA-PLM 2019 writing scale - cut point reference by Authors = Bands 4 and below /
Bands 5 and above

* command to be computed on the SEA-PLM 2019 student dataset- math/reading/writing
scale

* new dichotomic variable creation by learning domain for below and above end
primary international reference thereshold only

foreach v of varlist pvlread1-pvlread5 {
    gen `_v'=0 if `v'<6
}

foreach v of varlist pvlread1-pvlread5 {
    replace `_v'=1 if `v'>=6
}

repeat SVY, estimate(freq _pvlread@) over(Gender,test) by(cnt) outfile (g4)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

use g4,clear
export excel using g4.xls, first(var)

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*End Area 1*
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*Area 2*
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* Area 2 - Example of Stata command (reading scale only) for output data
* 2.1 Comparaison of reading means of boys and girls in Grade 5 by SES quartile

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* command to be computed on the SEA-PLM 2019 student dataset - example given only
for reading outputs

sort cnt
by cnt:egen quartile_ses = xtile(ses), n(4)
preserve

keep if quartile_ses==1
repest SVY, estimate(means pv@read) over(Gender,test) by(cnt) outfile (ses1rbg)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
restore

preserve
keep if quartile_ses==2
repest SVY, estimate(means pv@read) over(Gender,test) by(cnt) outfile (ses2rbg)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
restore

preserve
keep if quartile_ses==3
repest SVY, estimate(means pv@read) over(Gender,test) by(cnt) outfile (ses3rbg)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
restore

preserve
keep if quartile_ses==4
repest SVY, estimate(means pv@read) over(Gender,test) by(cnt) outfile (ses4rbg)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
restore

use ses1rbg,clear
append using ses2rbg
append using ses3rbg
append using ses4rbg
export excel using sesQrbg.xls, first(var)

* 2.2 Comparaison of reading means of boys among national stratum
* command to be computed on the SEA-PLM 2019 student dataset and by country -
example given only for reading outputs

destring StIDStrt, replace force

repest SVY, estimate(stata:reg pv@read) over(Gender,test) by(StIDStrt) outfile (ls1)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)

use ls1,clear

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export excel using ls1.xls, first(var)

* 2.3 Comparaison of reading means of boys among rural-urban
* command to be computed on the SEA-PLM 2019 student dataset - example given only
for reading outputs

destring SC09Q01, replace force
gen rural=.
replace rural=1 if SC09Q01==1
replace rural=0 if SC09Q01==2 | SC09Q01==3 | SC09Q01==4 | SC09Q01==5

repest SVY, estimate(stata:reg pv@read rural) over(Gender,test) by(cnt) outfile (r5)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
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use r5,clear
 export excel using rscore.xls, first(var)

use "C:\Users\amarivin\OneDrive - UNICEF\Data_Ant\STATA_SEA-PLM 2019\July
 versions\INT_ALL_(2020.08.25)_1.dta", clear

 End Area 2

 Area 3

*experiences, attitudes and level of perception of schools, reading only between
 boys and girls

*attitudes and level of perception of schools, reading per gender

* parent expectation
 destring PA12Q01, replace force
 gen hiedu=.
 replace hiedu=1 if PA12Q01==1 | PA12Q01==2 | PA12Q01==3
 replace hiedu=0 if PA12Q01==4 | PA12Q01==5
 repest SVY, estimate (stata: logit Gender hiedu ses) outfile (hiedu) by(cnt)
 svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
 variancefactor(StIDSch) NREP(95)])

* children school attitude
 repest SVY, estimate (stata: logit Gender schatt ses) outfile (schatt) by(cnt)
 svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
 variancefactor(StIDSch) NREP(95)])

* children math attitude
 repest SVY, estimate (stata: logit Gender mathatt ses) outfile (mathatt) by(cnt)

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svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])

* children global citizenship learning
repest SVY, estimate (stata: logit Gender gclearn ses) outfile (gclearn) by(cnt)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])

use hiedu, clear
append using schatt mathatt gclearn
export excel using perception.xls, first(var)

*** attitudes and level of perception of schools, reading, mathematics and writing
achievement per gender

destring PA12Q01, replace force

* parent expectation
gen hiedu=.
replace hiedu=1 if PA12Q01==1 | PA12Q01==2 | PA12Q01==3
replace hiedu=0 if PA12Q01==4 | PA12Q01==5

repest SVY, estimate(stata:reg pv@read hiedu ses) over(Gender,test) outfile (hiedur)
by(cnt) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
repest SVY, estimate(stata:reg pv@read schatt ses) over(Gender,test) outfile
(schattr) by(cnt) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
repest SVY, estimate(stata:reg pv@read mathatt ses) over(Gender,test) outfile
(mathattr) by(cnt) svyparms([NBpv(5) final_weight_name(WT2019)
rep_weight_name(rwgt) variancefactor(StIDSch) NREP(95)])
repest SVY, estimate(stata:reg pv@read gclearn ses) over(Gender,test) outfile
(gclearnr) by(cnt) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])

use hiedur, clear
append using schattr mathattr gclearnr
export excel using perception_performance.xls, first(var)

*** experiences at school

* children prescol
gen presc=.
destring PA10Q01, replace force
replace presc=1 if PA10Q01==2 | PA10Q01==1
replace presc=0 if PA10Q01==3

repest SVY, estimate (stata: logit Gender presc ses) by(cnt) outfile (presc)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])

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* children late entry
destring PA11Q01- PA12Q01, replace force
gen agentr=.
replace agentr=0 if PA11Q01==2 | PA11Q01==1
replace agentr=1 if PA11Q01==3 | PA11Q01==4

repest SVY, estimate (stata: logit Gender agentr ses) by(cnt) outfile (agentr)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

* children readiness
repest SVY, estimate (stata: logit Gender chilcap ses) by(cnt) outfile (chilcap)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

* children repetition
repest SVY, estimate (stata: logit Gender repea ses) by(cnt) outfile (repeat)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

use presc, clear
append using agentr chilcap repeat
export excel using experiences.xls, first(var)

*** differential effect of school experience on performance by gender (ses control)

gen presc=.
destring PA10Q01, replace force
replace presc=1 if PA10Q01==2 | PA10Q01==1
replace presc=0 if PA10Q01==3

destring PA11Q01- PA12Q01, replace force
gen agentr=.
replace agentr=0 if PA11Q01==2 | PA11Q01==1
replace agentr=1 if PA11Q01==3 | PA11Q01==4

repest SVY, estimate(stata:reg pv@read presc ses) over(Gender,test) by(cnt) outfile
(prescr) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]
repest SVY, estimate(stata:reg pv@read chilcap ses) over(Gender,test) by(cnt)
outfile (chilcapr) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]
repest SVY, estimate(stata:reg pv@read repea ses) over(Gender,test) by(cnt) outfile
(repear) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]
repest SVY, estimate(stata:reg pv@read agentr ses) over(Gender,test) by(cnt) outfile
(agentrr) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

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use prescr, clear
append using chilcapr repeat agentr
export excel using experiences_performance.xls, first(var)

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** outside school activities

*** probability of being boys or girls by type of outside school activity

destring ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06, replace force
foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06 {
    gen _`v'=. if `v'==7 | `v'==8 | `v'==9
}
foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06 {
    replace _`v'=0 if `v'==1 | `v'==2
}
foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06 {
    replace _`v'=1 if `v'==3 | `v'==4
}

rename _ST06Q01 house
rename _ST06Q02 farm
rename _ST06Q03 commercial
rename _ST06Q04 physical

repест SVY, estimate (stata: logit Gender house ses) by(cnt) outfile (house)
svyparams([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

repест SVY, estimate (stata: logit Gender farm ses) by(cnt) outfile (farm)
svyparams([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

repест SVY, estimate (stata: logit Gender commercial ses) by(cnt) outfile
(commercial) svyparams([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

repест SVY, estimate (stata: logit Gender physical ses) by(cnt) outfile (physical)
svyparams([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])]

use house, clear
append using farm commercial physical
export excel using outsideschool.xls, first(var)

*** differential effect of household activities on performance by gender

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*** probability of being boys or girls by type of household activity

destring ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06, replace force
foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06 {
    gen _`v'=. if `v'==7 | `v'==8 | `v'==9
}

foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06 {
    replace _`v'=0 if `v'==1 | `v'==2
}

foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 ST06Q05 ST06Q06 {
    replace _`v'=1 if `v'==3 | `v'==4
}

rename _ST06Q01 house
rename _ST06Q02 farm
rename _ST06Q03 commercial
rename _ST06Q04 physical

repest SVY, estimate(stata:reg pv@read house ses) over(Gender,test) by(cnt) outfile
(houser) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
repest SVY, estimate(stata:reg pv@read farm ses) over(Gender,test) by(cnt) outfile
(farmr) svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
repest SVY, estimate(stata:reg pv@read commercial ses) over(Gender,test) by(cnt) outfile
(commercialr) svyparms([NBpv(5) final_weight_name(WT2019)
rep_weight_name(rwgt) variancefactor(StIDSch) NREP(95)])
repest SVY, estimate(stata:reg pv@read physical ses) over(Gender,test) by(cnt) outfile
(physicalr) svyparms([NBpv(5) final_weight_name(WT2019)
rep_weight_name(rwgt) variancefactor(StIDSch) NREP(95)])

use houser, clear
append using farmr commercialr physicalr
export excel using outsideschool_performance.xls, first(var)

*** mean performance ALL CHILDREN by accumulation of hosuehold activities

destring ST06Q01 ST06Q02 ST06Q03 ST06Q04, replace force

foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 {
    gen _`v'=. if `v'==7 | `v'==8 | `v'==9
}

foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 {
    replace _`v'=0 if `v'==1 | `v'==2
}

foreach v of varlist ST06Q01 ST06Q02 ST06Q03 ST06Q04 {

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replace _`v'=1 if `v'==3 | `v'==4
}

gen cumulationlabor=.
replace cumulationlabor=0 if _ST06Q01+_ST06Q02+_ST06Q03+_ST06Q04==0
replace cumulationlabor=1 if _ST06Q01+_ST06Q02+_ST06Q03+_ST06Q04>=1

tab cumulationlabor

repest SVY, estimate(stata:reg pv@read cumulationlabor) by(cnt) outfile (housr)
svyparms([NBpv(5) final_weight_name(WT2019) rep_weight_name(rwgt)
variancefactor(StIDSch) NREP(95)])
```

use housr, clear
 export excel using outsideschool_performance1.xls, first(var)

 End Area 3
