Statistics/Data analysis

```
*legend
putexcel set "${xls tool}", sheet(legend) modify
global row = 3
foreach aggregate in market income $comp list {
        qui putexcel E${row} = "`aggregate'"
        global row = \$\{row\} + 1
        foreach var in $`aggregate' {
                qui putexcel E${row} = "`var'"
                global row = \$\{row\} + 1
        }
*net cash position
global row = 1
foreach group var in all decile decile final hh type county strata2 {
        use "${postSimulationData}\12 ${countryName} ${simulationName} ${output inc
> concepts \ . dta", clear
        if "`group var'" == "all" {
                qen all = 1
        if "`group var'" == "decile" {
                 \underline{\text{ebin}} \$\{\text{rank\_var}\} [aw = \$\text{weight}], gen(decile) nq(10)
        if "`group var'" == "decile final" {
                 \underline{\text{ebin final\_income }} [aw = \text{$weight}], gen(decile\_final) nq(10)
        groupfunction [pw = $weight], sum(${income list} ${comp list} ${program list
> }) by(`group var') norestore
        foreach var in $income_list $comp_list $program_list {
                 qui replace `var' = `var' / 10^6
        }
        sort `group var'
        order `group var' ${income list} ${comp list} ${program list}
        export excel "${xls tool}", sheet(totals) sheetmodify cell(A${row}) firstrow
> (variables) keepcellfm
        global row = \$\{row\} + N + 2
}
* recipients
putexcel set "${xls tool}", sheet(recipients, replace) modify
putexcel A1 = "househols" A5 = "individuals"
use "${postSimulationData}\12 ${countryName} ${simulationName} ${output inc concepts
> }.dta", clear
groupfunction, sum(hh weight ${program list}) by(hhID) norestore
foreach var in $program_list {
        replace `var' = (`var' != 0)
}
```

```
groupfunction [pw = hh weight], sum(${program list}) norestore
foreach var in $program list {
        replace `var' = `var' / 10^3 // thsd households
export excel "${xls tool}", sheet(recipients) sheetmodify cell(A2) firstrow(variable
> s) keepcellfm
use "${postSimulationData}\12_${countryName}_${simulationName}_${output_inc_concepts}
> }.dta", clear
foreach var in $program_list {
        replace `var' = (`var' != 0)
}
groupfunction [pw = $weight], sum(${program list}) norestore
foreach var in $program_list {
    replace `var' = `var' / 10^3 // thsd individuals
export excel "${xls tool}", sheet(recipients) sheetmodify cell(A6) firstrow(variable
> s) keepcellfm
* Gini and Poverty
use "${postSimulationData}\12 ${countryName} ${simulationName} ${output inc concepts
> }.dta", clear
gen all = 1
sp_groupfunction [aw = $weight], gini(${income_list}) theil(${income_list}) poverty(
> \overline{\$}\{\text{income list}\}) \text{ povertyline}(\$\{\text{povline}\}) \text{ by}(\overline{all})
gen concat = variable +" "+ measure+" "
order concat, first
export excel "${xls tool}", sheet(gini poverty) sheetreplace first(variable)
* Gini and Poverty by groups
global row = 1
foreach group_var in hh_type county strata2 {
        use "${postSimulationData}\12 ${countryName} ${simulationName} ${output inc
> concepts \ . dta", clear
        sp groupfunction [aw = $weight], poverty(${income list}) povertyline(${povli
> ne}) by(\(\bar{group var'}\)
        keep if measure == "fqt0"
        decode `group_var', generate(`group_var'_str)
gen concat = variable +"_" + `group_var'_str
         order concat, first
        drop `group var' str
        export excel "${xls tool}", sheet(gini poverty) sheetmodify cell(I${row}) fi
> rstrow(variables) keepcellfm
        global row = \$\{row\} + 100
}
```

```
*-----
 use \ "\${postSimulationData}\12 \ \${countryName}_\${simulationName}_\${output\_inc\_concepts} 
> }.dta", clear
        _ebin ${rank_var} [aw = $weight], gen(decile) nq(10)
        foreach var in $SSC $direct taxes $indirect taxes SSC direct taxes indirect
> taxes {
                replace `var' = -`var'
sp groupfunction [aw = $weight], mean(${program list} ${comp list}) ${income list})
> by(decile)
        gen concat = variable +" "+ measure+" " +string(decile)
        order concat, first
export excel "${xls tool}", sheet(all) sheetreplace first(variable)
* Marginal contributions
use "${postSimulationData}\12 ${countryName} ${simulationName} ${output inc concepts
> }.dta", clear
gen all = 1
global MC list
foreach inc in market market pens net market gross disposable consumable final {
        foreach var in $program_list $comp_list {
    gen double `inc'_`var' = `inc'_income - `var'
                global MC list $MC list `inc' `var'
        }
sp groupfunction [aw = $weight], gini(${MC list}) poverty(${MC list}) povertyline(${
> \overline{povline}) by (all)
keep if measure == "fgt0" | measure == "gini"
gen concat = variable +" "+ measure
keep concat variable measure value
order concat concat variable measure value
sort concat
export excel "${xls tool}", sheet(MC) sheetreplace first(variable)
shellout using "${xls tool}"
```