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* =====
**# Kenya FiscalSim - fiscal microsimulation model for Kenya.
* Prepared by EPL team (Mikhail Matytsin and Yared Seid)
* January 2023.
* =====

        version 17
        clear all
        set more off
        macro drop _all
        set linesize 200
        set type double, permanently

        /* Please change this to your own path */
        if (lower("`c(username)'"') == "wb484182"){                                // Yared's p
> ath
        global path "C:\Users\wb484182\OneDrive - WBG\1ys_EPL\1Projects\Kenya
> a-2022FY-FiscalMicroSim\Assessments\FiscalMicrosim"
        }
        else if (lower("`c(username)'"') == ""){
            global path "" // PUT YOUR PATH HERE!!!
        }

* =====
        *DO NOT MODIFY BEYOND THIS POINT
* =====
>

* =====
        **# Macros for folders, data names, etc
* =====

        *****
        /* Macros for key folders and excel tool */
        global data      "${path}\01.Data"
        global thedo      "${path}\02.Dofile"
        global theado      "${thedo}\ados"
        global xls_tool   "${path}\03.Tool\Kenya_FiscalMicrosim.xlsx"

        /* A folder where data sources used in the Microsim assessments are saved */
        global preSimulationData      "${data}\01.PreSimulationData"
> a"

        /* A folder where intermediate data generated by Microsim tool are saved */
        global simulationData      "${data}\02.SimulationData"
        /* A folder where final/output data generated by Microsim tool are saved */
        global postSimulationData      "${data}\03.PostSimulationData"
> ta"

        *****
        /* Macros for prefix in data names, dofile names, etc */
        global dateStamp:      display %tdCCYY-NN-DD date(c(current_date),
> "DMY")
        global countryName      "Kenya"
        global simulationName    "FiscalMicrosim"

        /* Macros for suffix in pre-simulation data names, i.e., cleaned hh survey d
> ata used as an input in the microsim assessments which are saved in "01.Data\01.Pr
> eSimulation" folder */
        global cleanedSurveyData_dem_inc      hhSurvey_cleanedData_dem_inc
> // data "01_*"
        global cleanedSurveyData_exp      hhSurvey_cleanedData_exp
> // data "02_*"

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*****
/* Macros for suffix in simulation data names, i.e., those to be saved in "0
> 1.Data\02.SimulationData" and "01.Data\03.PostSimulationData" folders */
/* Suffix for survey year (SY) data */
global dem_inc_SY          Demography_Income_SY
> // data "01_*"
global dem_SY              Demography_SY
> // data "02_*"
global mkt_inc_SY          Market_Income_SY
> // data "03_*"
global exp_SY              Expenditure_SY
> // data "04_*"

/* Suffix for policy year (PY) data */
global dem_PY              Demography_PY
> // data "05_*"
global mkt_inc_PY          Market_Income_PY
> // data "06_*"
global ssc_dir_tax_PY      SSC_Direct_Taxes_PY
> // data "07_*"
global pens_dir_trans_PY   Pensions_Direct_Transfers_PY      // data "08_
> "*"

global indir_tax_PY        Indirect_Taxes_PY
> // data "09_*"
global indir_subcidy_PY    Indirect_Subcidy_PY
> // data "10_*"
global inkind_trans_PY     Inkind_Transfers_PY
> // data "11_*"

/* Suffix for final output data which is saved in "01.Data\03.PostSimulation
> " -- data to be used for all microsim assessments reported in the excel tool */
global output_inc_concepts Output_Income_Concepts            // d
> ata "12_*"
*****

*=====
**# Adding ado directory at the beginning of the system's ado path
*=====
cap qui adopath++ "${theado}" // this is a folder where the project ado fi
> les are saved

*=====
**# Assigning gloabl macros to selected microsim variables
*=====
global market_income       wage entr_inc cap_inc rent_inc // ag
> ri_inc other_inc

global SSC                  SIC
global direct_taxes         PIT

global pensions             lab_pens
global direct_transfers     priv_trans govt_trans oth_pens /*soc
> _pens unem_ben child_ben GMI other_ben*/

global indirect_taxes       VAT_dir VAT_ind
>
global indirect_subsidies    utility_subs_dir utility_subs_ind

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global health                                health_in health_out
>
global education                            educ_prim educ_sec educ_tert

global weight                                ind_weight      // Misha - i
> nd_weight is also included in $dem_list below, why do we need to have it in 2 glob
> al macros?

global povline                                povline_nat povline_nat_food
> //povline_int32 povline_int55 // Misha - I added food pov line as well since we h
> ave it in the data // you may choose between a few available poverty lines (for ex
> ample, national and international)
global rank_var                                market_income //choose betwe
> en market income and market plus pensions - this is equivalent for PGT and PDI sce
> narios to some extent

global dem_list                                hh_size ind_weight hh_weight
> age relationship hh_type strata1 strata2 strata3 county/*region*/ povline_*

global income_list                            market_income market_pens_income net
> _market_income gross_income disposable_income consumable_income final_income

global comp_list                                SSC direct taxes pensions di
> rect_transfers indirect_taxes indirect_subsidies /*health education*/

*=====
*                               **# Running the do files
*=====

* 0. Putting parametr in excel to macros (needed for both pre-simulation an
> d simulation stages)
do "${thedo}\00_xls_parameters.do"

* 1. Pre-simulation stage (needs to be run only once to get the input data)
do "${thedo}\01_input_data.do"
do "${thedo}\02_market_income.do"
do "${thedo}\03_gross_expenditures.do"           // for now I use exp EXAMPLE
> data

* 2. Simulation stage (needs to be run for every scenario)
do "${thedo}\04_uprating.do"
do "${thedo}\05_SSC_direct_taxes.do"
do "${thedo}\06_pensions_direct_transfers.do"

do "${thedo}\07_indirect_taxes.do"
do "${thedo}\08_indirect_subsidies.do"
do "${thedo}\09_inkind_transfers.do"
do "${thedo}\10_income_concepts.do"

* 3. Post-simulation stage (needs to be run for every scenario)
do "${thedo}\11_output.do"

*=====

exit

```