SOUTHMOD Exercises



September 2019









Instruction

- 1. All exercises should be undertaken on the 2017 System
- 2. The Design and Set-Up of the Exercise Start with Simple to More Involving Questions

Note: The exercises presented below are applicable to TAZMOD model v1.7.

Part A: Simple Questions

Exercise 1: Navigating the TAZMOD interface

- a. How many tax and how many benefit policies are there in TAZMOD?
- b. In which policy would you find the amount of Fixed Basic Cash Transfer payable in respect of a child, and what is the amount payable per month?
- c. Which policy(s) define the model output?
- d. Which poverty line is currently switched off in the model?
- e. How many functions are there in the Variable Conditional Tax Transfer Policy?
- f. How many systems are in TAZMOD v. 1.7?

Exercise 2: Exploring TAZMOD

- a. What is meant by 'the spine'?
- b. Access the 'uprating indices' how many indices are there? What are they? And list the values for 2017.
- c. Find the income list for 'original income'. What is it called, and what are the income components?
- d. How many policy functions are used in TAZMOD?
- e. Identify any policies using the *SchedCalc* function

Part B: Moderate Question

Exercise 3: Running TAZMOD

- a. Run TAZMOD systems TZ_2015 and TZ_2017. Run Statistics Presenter to compare the output of the two systems using consumption based distribution measures. Has poverty and/or inequality increased or decreased between the two years?
- b. Run Statistics Presenter to compare the output of the two systems using income based distribution measures. Has poverty and/or inequality increased or decreased between the two years?

Part C: Relatively Difficult Questions

For Questions 4 and 5 use the food poverty line for both the base system (TZ_2017) and the Reform System. Create a new Reform System for each policy reform.

Exercise 4: Amending a Policy for the TZ_2017 system

[In all cases calculate the costs/savings of the new policy/policy modification and comment fully on the impact on consumption-based poverty and inequality]

- a. Amend the Fixed Basic Cash Transfer adult rate from TSH 10,000 to TSH 15,000 per month.
- b. Amend the VAT policy. Increase the VAT rate from 18% to 20%. How much extra VAT would this raise?
- c. Amend the Presumptive Tax policy. Increase the upper limit for presumptive tax from TSH 20,000,000 to TSH 25,000,000. How much will the government gain or lose in direct taxes?
- d. Change the Poverty Line from the food poverty line to the basic poverty line for the 2017 system. How do the poverty rates compare?
- e. Estimate the impact on poverty and inequality of the existing social transfers system using the food poverty line.
- f. Implement a reform scenario by amending the VAT policy as follows: a number of products which had been included in the normal rate of VAT are now zero rated. These products are dried fruits, roasted groundnuts, peas (dried), beans (dried), vegetables (dried), cassava (dry) and all types of school uniforms. How much will the government lose in indirect taxes?

Exercise 5: Introducing a new Policy for the TZ_2017 system

[In all cases calculate the costs/savings of the new policy/policy modification and comment fully on the impact on consumption-based poverty and inequality]

- a. Introduce a universal Old Age Benefit payable at TSD 20,000 per month for those aged 60 or over.
- b. Amend the Old Age Benefit Policy so that those aged 75 or over receive an additional TSH 10,000 per month
- c. Introduce a Child Benefit of TSH 15,000 per month in respect of children living in food poor households
- d. Introduce a universal Child Benefit of TSH 15,000 per month to replace any assistance through the PSSN (FBCT and VCCT). Compare the results both with the baseline system and the results of question 5c.