A USER-FRIENDLY MODELLING INTERFACE





WHY A USER FRIENDLY MODELLING INTERFACE?

- Increasing demand for impact assessment to evaluate policy responses to the climate crisis
- Widespread use of models in impact assessment: UN, World Bank, European Commission, national Governments etc.
- Models are complex and require expertise to use
- GAMS-MIRO new software



AIM

- Introduce the user-friendly modelling interface
- Walk through the process of scenario modelling
- Conduct an impact assessment
- Unlock the power of models without the costs of training
- Improve cost effectiveness by extracting more from investments to set up models



TYPICAL DISSEMINATION





WITH THE USER INTERFACE





ASSUMPTION

- Underlying model is of good quality
 - Data
 - Behavioural relationships
 - Mechanisms
 - Parameter values



THE PROCESS OF IMPACT ASSESSMENT

Specify the policy question
Define scenario narrative

3. Quantify scenario: levers & magnitude

4. Run model & analyse results



HANDS-ON EXERCISE

1. Specify the policy question:

How is the implementation of an international response measure likely to impact the domestic economy of a non-participating country?

- 2. Define the scenario narrative
 - Predefined summary, space to flesh it out



A QUICK DETOUR INTO THE MODEL

cgemod

- Economy-wide Computable General Equilibrium Model
- Calibrated to 2014 Social Accounting Matrix for Senegal
- 23 commodities & sectors, 19 factors, 10 household groups





QUANTIFY THE SCENARIO



- Models are like machines with levers
- Move the levers, change the model outcomes → impacts
- Which levers?
 - Policy instruments
 - Functioning of the economy
- How much to move them?



RUN THE MODEL & ANALYSE RESULTS

Macroeconomic indicators

Structural change

- Production
- Value added shares
- Factor returns
- Labour demand

Trade

Household income and consumption

Government revenue and spending

Selected SDG indicators



DEMONSTRATION



SUMMARY

- Interact with complex models
- Complement studies with dynamic explorations
- Flexible interface
 - Models: global, national
 - Time scale: static, dynamic
 - Levers: few, many, all
 - Results: tailored to your needs
- Options for access to global model or tailored country models
- In development feedback welcome 😳

