

# OG-ETH: An example of a full-economy model for Ethiopia

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# Overview

- OG-ETH Inputs
  - Parameters and larger objects
  - Where to find them
- OG-ETH Output
  - Where it is
  - How to access it
  - Different ways to display it
- Ways to run the model

## Takeaway

Basic understanding of model parameters, outputs, and how to run the model

# OG-ETH Inputs

## Two types of inputs

Parameters and arrays: Necessary info for model simulation

- New description of all parameters in OG-Core appendix chapter “[Model parameters](#)”
- New list of uniquely calibrated parameters in [OG-ETH documentation](#)
- Best description in OG-Core [default\\_parameters.json](#) file
- Other inputs, such as demographics, are created/updated with other files like [parameters.py](#) in OG-Core, and [calibrate.py](#) in OG-ETH

# Default parameters and parameters object

- Go through OG-Core `default_parameters.json` and “[Model parameters](#)” chapter
- Instantiate a default OG-Core parameters object in notebook
- Go through OG-ETH `ogeth_default_parameters.json`
- Update the parameters object in notebook to OG-ETH default
- Show how to update and change parameters in scripts

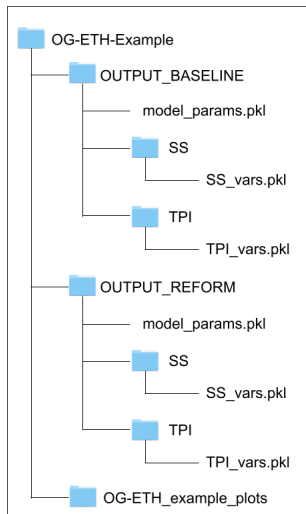
# OG-ETH output

Two main output files for each Simulation

- `SS_vars.pkl`
- `TPI_vars.pkl`

## Notebook

Go through output and image objects and show automatic functionality



# Ways to run OG-ETH

- ❶ (Local) Clone/download all repository files
  - Best for developing and customizing
  - Create `ogeth-dev` conda environment
  - Run either with Python scripts or in Jupyter notebook
- ❷ (Local) `pip install ogeth` from PyPI.org
  - Best if only want parameter changes, and don't need to change underlying model
  - Run either with Python scripts or in Jupyter notebook
- ❸ (Cloud) Run in Google Colab using `pip install ogeth`  
(<https://tinyurl.com/ogeth-colab>)

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