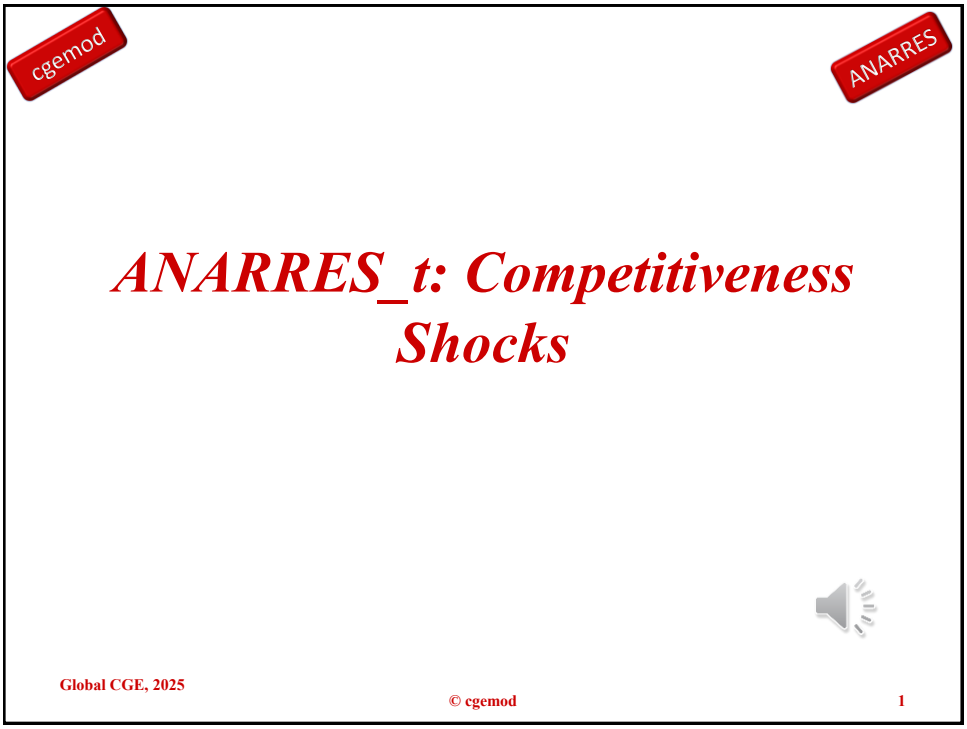
cgemod
ANARRES
ANARRES_t: Competitiveness Shocks
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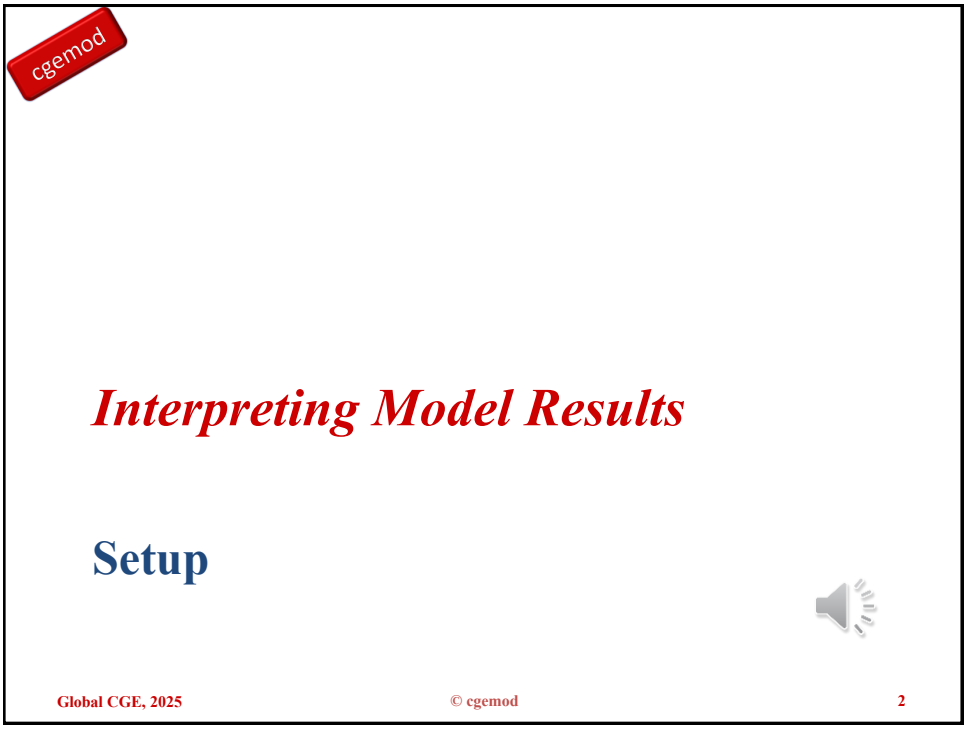
1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Interpreting Model Results
Setup
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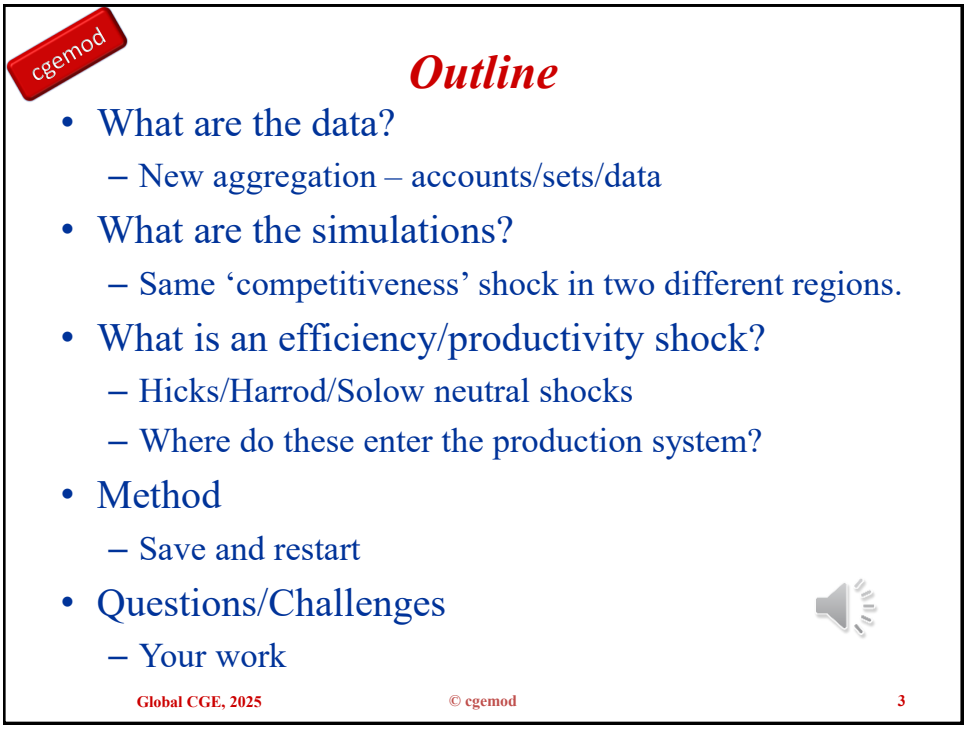
2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Outline
• What are the data?
– New aggregation – accounts/sets/data
• What are the simulations?
– Same 'competitiveness' shock in two different regions.
• What is an efficiency/productivity shock?
– Hicks/Harrod/Solow neutral shocks
– Where do these enter the production system?
• Method
– Save and restart
• Questions/Challenges
– Your work
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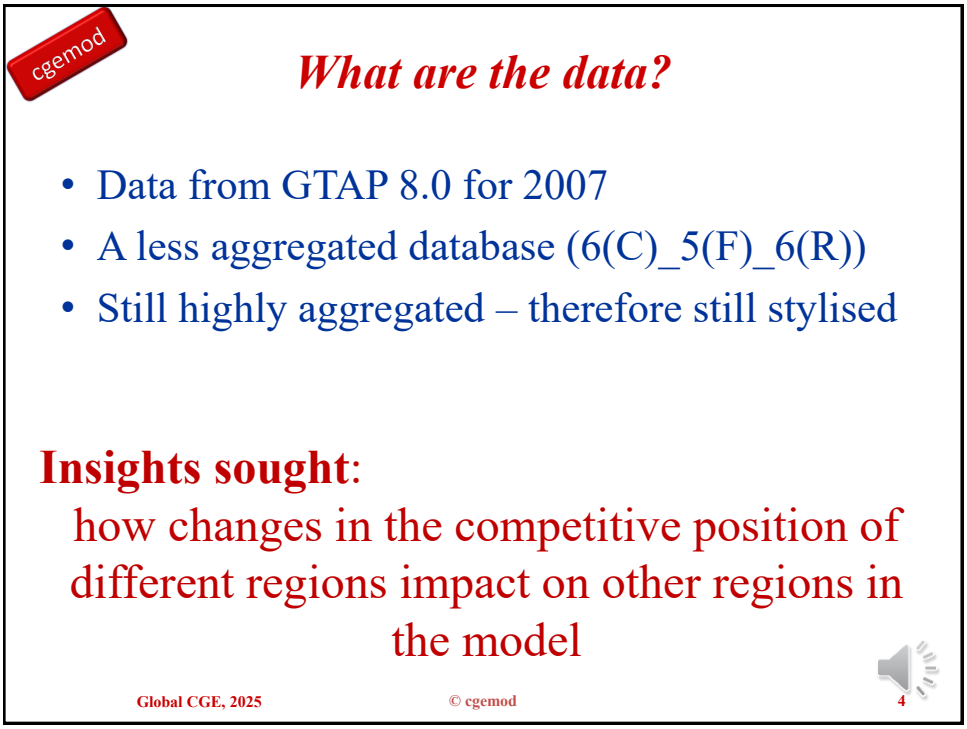
3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What are the data?
• Data from GTAP 8.0 for 2007
• A less aggregated database (6(C)_5(F)_6(R))
• Still highly aggregated – therefore still stylised
Insights sought:
how changes in the competitive position of different regions impact on other regions in the model
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What are the simulations?

SHOCKS

2.5% TFP in crops in Australia & New Zealand

```
ADXSIM("acrop","anz","sim01")    =
                adx0("acrop","anz") * 1.025 ;
```

2.5% TFP in crops in USA and Canada

```
ADXSIM("acrop","namer","sim02") =
              adx0("acrop","namer") * 1.025 ;
```


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What is a productivity shock?

- The model includes 3 different sets of efficiency parameters
  - ADX
  - ADVA
  - ADFD
- Do we want the productivity shocks to be
  - Hicks neutral?
  - Harrod neutral? or
  - Solow neutral?

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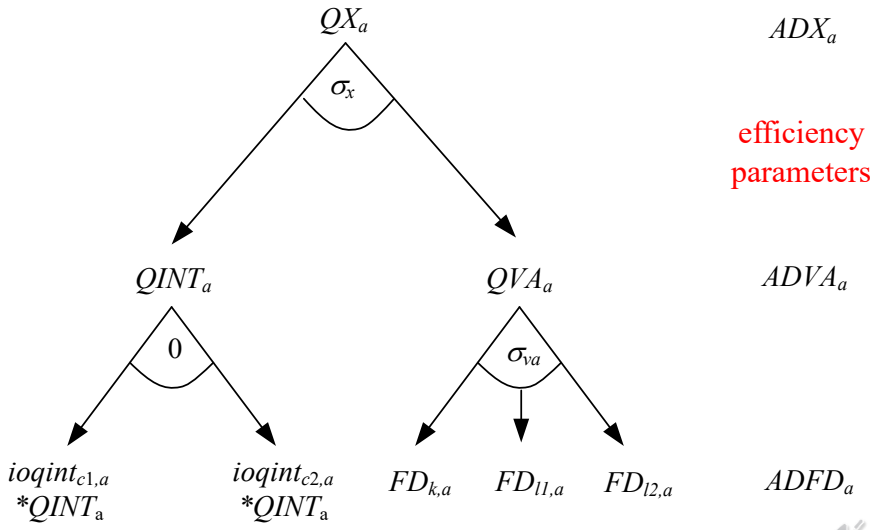
What is a efficiency shock?



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Method

Use an efficient method of working

- Use SAVE (‘`s=save`’)
- Use RESTART (‘`r=save`’)

With this ‘small’ model the time savings are small, but as the model grows, and as you develop your own experiments, the time savings can become large.

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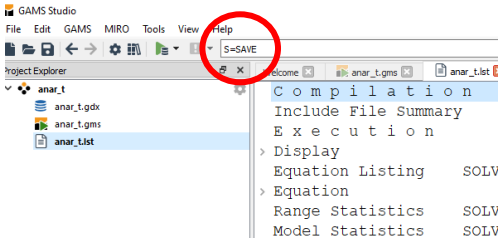
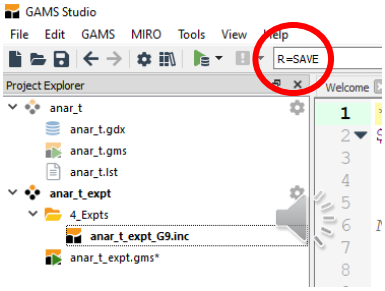
Method

Model programme file



Experiment programme file



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Tasks

- Review the data
- Edit the code to use the new data
- Run the model (‘s = save’)
- Run the shocks (‘r = save’)
- Verify what shocks have been implemented
- Answer some questions/challenges

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Questions

1. What happens to production in each activity in the region in which there is an efficiency productivity shock?
2. What happens to factor returns?
3. Why does an efficiency shock in Australia/New Zealand have effects that are different from a productivity shock (of the same magnitude) in North America?

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Guidance

EXPLAIN THE RESULTS

Do not just report the results

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EXPLAIN *Questions*

WHY?

1. What happens to production in each activity in the region in which there is an efficiency shock?
2. What happens to factor returns?
3. Why does the same efficiency shock in Australia/New Zealand have effects that are different an efficiency shock (of the same magnitude) in North America?

WHY?

EXPLAIN

EXPLAIN

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The End

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