

# Welcome and Overview

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NBER Heterogeneous-Agent Macro Workshop

Adrien Auclert

Spring 2022

# Welcome

- This is the Heterogeneous-Agent Macro Workshop
- All taking place here in the Royal Sonesta Hotel
  - Lectures in Longfellow BC, lunches in Longfellow A, dinners in Parkview
- Generously funded by the NSF, fantastic planning help from the NBER staff
- 35 students from US & Europe selected from 230 outstanding applications
- Teaching material is collaboration between Adrien Auclert, Bence Bardóczy, Michael Cai, Rodolfo Rigato, Matt Rognlie, Martin Souchier & Ludwig Straub

## Workshop objectives

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- We assume prior background in dynamic programming and NK models
- We'll use the **sequence-space-jacobian toolbox** to automate the hard steps. We'll teach you how to use it, as well as what's going on in the background.

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→ no longer any need to do either!
- Instead, can focus on key new questions for the field, eg:
  - when does heterogeneity matter?
  - what micro moments are important for aggregate outcomes?
- Exciting and fast growing literature. We're looking forward to your answers!



## The sequence-space jacobian: a method and a philosophy

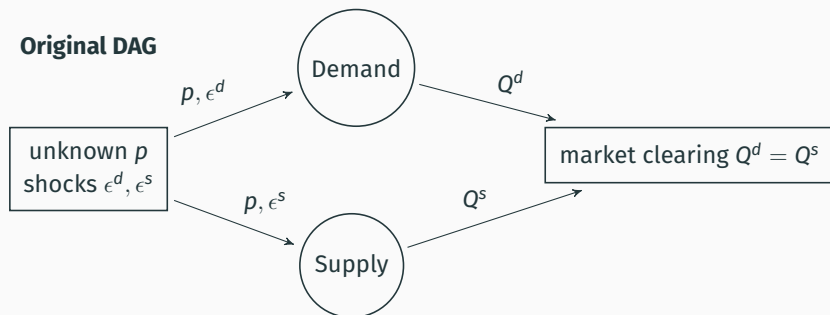
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- We'll often arrange these blocks into Directed Acyclic Graph (“DAG”).  
Helpful to solve model, think about causality in GE, do decompositions, etc

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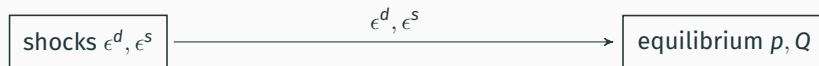
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### Solved model



- Schedule, syllabus, and lecture notes posted at:  
[nber.org/conferences/heterogeneous-agent-macro-workshop-spring-2022](https://nber.org/conferences/heterogeneous-agent-macro-workshop-spring-2022)
- Code for lecture notebooks and tutorials posted at:  
[github.com/shade-econ/nber-workshop-2022](https://github.com/shade-econ/nber-workshop-2022)
- Please come to tutorials with your laptops
- We are not recording these lectures to encourage class participation
- But we are planning to post videos at above link in the next few weeks

## How can you get involved?

- Ask questions in class (but remember each class is short)
- Point out typos/errors in class material
- Raise issues with the code in the class repo
- After the workshop:
  - fill out our exit survey
  - contribute to our code replication archive (TBA)
- Talk to us if you want to get even more involved with developing SSJ!