

Course Plan: Heterogeneous Agent Macro

Jepppe Druedahl

Course page: sites.google.com/view/numeconcph-het-agent-macro

Preparation:

1. Install Python and VSCode as explained [here](#).
2. Watch the lecture videos on Python (~ 10 hours) [here](#).
3. Go through the associated lecture notebooks [here](#).

Lectures

- **Lecture 0. Introduction**

Overview: [Heathcote et al. \(2009\)](#); [Kaplan and Violante \(2018\)](#); [Cherrier et al. \(2023\)](#).

- **Lecture 1. Consumption-saving**

Central: [Carroll \(1997\)](#); [Druehdahl \(2021\)](#)

More economics: [Modigliani and Brumberg \(1954\)](#); [Friedman \(1957\)](#); [Deaton \(1991\)](#); [Carroll \(1992, 2006\)](#); [Kaplan and Violante \(2014\)](#); [Kaplan et al. \(2014\)](#); [Jørgensen \(2017\)](#); [Carroll et al. \(2021\)](#); [Guvenen et al. \(2021\)](#); [Fagereng et al. \(2021\)](#); [Harmenberg and Oberg \(2021\)](#); [Druehdahl et al. \(2021\)](#); [Druehdahl and Martinello \(2022\)](#). More computational: [Carroll \(2006\)](#); [Iskhakov et al. \(2017\)](#); [Druehdahl and Jørgensen \(2017\)](#); [Harmenberg \(2021\)](#). Deep learning: [Maliar et al. \(2021\)](#); [Azinovic et al. \(2022\)](#); [Kase et al. \(2022\)](#); [Han et al. \(2021\)](#).

- **Lecture 2. Stationary equilibrium**

Central: [Aiyagari \(1994\)](#); [Hubmer et al. \(2021\)](#)

GEModelTools: [Druehdahl \(2024a,f,c\)](#). Histogram simulation: [Young \(2010\)](#); [Tan \(2020\)](#); [Ocampo and Robinson \(2022\)](#).

- **Lecture 3. Transitional dynamics**

Central: [Boppart et al. \(2018\)](#); [Auclert et al. \(2021a\)](#).

GEModelTools: [Druehdahl \(2024a,f,c\)](#). More on policy: [McKay and Wolf \(2023\)](#); [Dávila and Schaab \(2023\)](#).

- **Lecture 4. HANK**

Central: [Werning \(2015\)](#); [Kaplan et al. \(2018\)](#); [Auclert et al. \(2023\)](#); [Broer et al. \(2023a\)](#).

GEModelTools: [Druehdahl \(2024d,e,b,g,h\)](#). More HANK: [Bayer et al. \(2019\)](#); [Hagedorn et al. \(2019\)](#); [Auclert et al. \(2020, 2021b\)](#); [Druehdahl et al. \(2022\)](#). More zero-liquidity: [McKay et al. \(2017\)](#); [Acharya and Dogra \(2020\)](#); [Broer et al. \(2020\)](#); [Bilbiie \(2021\)](#); [Ravn and Sterk \(2021\)](#); [Broer et al. \(2023b\)](#).

Plan

Monday: Lecture 0+1: 9:00 - 13:00

Tuesday: Lecture 2: 10:00 - 13:00

Wednesday: Lecture 3: 10:00 - 13:00

Thursday: Lecture 4: 10:00 - 13:00

Code-packages

1. EconModel:

github.com/NumEconCopenhagen/EconModel

github.com/NumEconCopenhagen/EconModelNotebooks

2. ConSav:

github.com/NumEconCopenhagen/ConsumptionSaving

github.com/NumEconCopenhagen/ConsumptionSavingNotebooks

3. GEModelTools:

github.com/NumEconCopenhagen/GEModelTools

github.com/NumEconCopenhagen/GEModelToolsNotebooks

References

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