Course Plan: **Heterogeneous Agent Macro**

Jeppe Druedahl

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

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); Druedahl (2021)
  More economics: Modigliani and Brumburg (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); Druedahl et al. (2021); Druedahl and Martinello (2022). More computational: Carroll (2006); Iskhakov et al. (2017); Druedahl 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: Druedahl (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: Druedahl (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: Druedahl (2024d,e,b,g,h). More HANK: Bayer et al. (2019); Hagedorn et al. (2019); Auclert et al. (2020, 2021b); Druedahl 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

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