

# Course Plan:

## Adv. Macro: Heterogeneous Agent Models

Jeppe Druedahl (JD) & Patrick Moran (PM)

*All articles are posted under »Files« on Absalon*

### I. Consumption-Saving

- **Lecture 1. Introduction** (JD)

Additional material: [Heathcote et al. \(2009\)](#); [Kaplan and Violante \(2018\)](#)

- **Lecture 2. Consumption-saving models** (PM)

Required reading: [Kaplan and Violante \(2014\)](#)

Additional material: [Harmenberg and Oberg \(2021\)](#); [Kaplan and Violante \(2021\)](#)

- **Lecture 3. Deviations from full rationality** (PM)

Required reading: [Carroll et al. \(2020\)](#)

Additional material: [Attanasio et al. \(2020\)](#)

### II. Stationary Equilibrium

- **Lecture 4. Stationary equilibrium** (JD)

Additional material: [Aiyagari \(1994\)](#)

Additional material: Nothing

- **Lecture 5. Wealth inequality** (PM)

Required reading: [Hubmer et al. \(2021\)](#)

Additional material: *TBA*

- **Lecture 6. Housing wealth** (PM)

Required reading: [Sommer and Sullivan \(2018\)](#)

Additional material: *TBA*

### III. Transition Path

- **Lecture 7. Transition path** (JD)

Required reading: Documentation for [GEModelTools](#) (*except on linearized solution and simulation*)

Additional material: [Auclert et al. \(2021\)](#), [Kirkby \(2017\)](#)

- **Lecture 8. Indebted demand** (PM)

Required reading: *TBA*

Additional material: *TBA*

### IV. HANK

- **Lecture 9. Analytical HANK models** (PM)

Required reading: [Werning \(2015\)](#); [Auclert et al. \(2018\)](#); [Broer et al. \(2020\)](#)

Additional material: Nothing

- **Lecture 10. A baseline HANK model** (JD)

Required reading: [Auclert et al. \(2021\)](#)

Additional material: [Bayer et al. \(2019\)](#); [Auclert et al. \(2020\)](#)

- **Lecture 11. HANK-SAM** (JD)

Required reading: *TBA*

Additional material: *TBA*

- **Lecture 12. I-HANK** (Guest)

Required reading: *TBA*

Additional material: *TBA*

- **Lecture 13. Global solution methods with aggregate risk** (JD)

Required reading: *TBA*

Additional material: *TBA*

### Conclusion

- **Lecture 14. Exam preparation** (JD)

## References

- Aiyagari, S. R. (1994). Uninsured Idiosyncratic Risk and Aggregate Saving. *The Quarterly Journal of Economics*, 109(3):659–684. Publisher: Oxford University Press (OUP).
- Attanasio, O., Kovacs, A., and Moran, P. (2020). Temptation and Commitment: Understanding Hand-to-Mouth Behavior. Publisher: Zenodo.
- Auclert, A., Bardoczy, B., Rognlie, M., and Straub, L. (2021). Using the Sequence-Space Jacobian to Solve and Estimate Heterogeneous-Agent Models. *Econometrica*, 89(5):2375–2408.
- Auclert, A., Rognlie, M., and Straub, L. (2018). The Intertemporal Keynesian Cross. NBER Working Paper 25020, National Bureau of Economic Research.
- Auclert, A., Rognlie, M., and Straub, L. (2020). Micro Jumps, Macro Humps: Monetary Policy and Business Cycles in an Estimated HANK Model. NBER Working Paper 26647.
- Bayer, C., Luetticke, R., Pham-Dao, L., and Tjaden, V. (2019). Precautionary Savings, Illiquid Assets, and the Aggregate Consequences of Shocks to Household Income Risk. *Econometrica*, 87(1):255–290.
- Broer, T., Harbo Hansen, N.-J., Krusell, P., and Oberg, E. (2020). The New Keynesian Transmission Mechanism: A Heterogeneous-Agent Perspective. *The Review of Economic Studies*, 87(1):77–101.
- Carroll, C. D., Crawley, E., Slacalek, J., Tokuoka, K., and White, M. N. (2020). Sticky Expectations and Consumption Dynamics. *American Economic Journal: Macroeconomics*, 12(3):40–76.
- Harmenberg, K. and Oberg, E. (2021). Consumption dynamics under time-varying unemployment risk. *Journal of Monetary Economics*, 118:350–365.
- Heathcote, J., Storesletten, K., and Violante, G. L. (2009). Quantitative Macroeconomics with Heterogeneous Households. *Annual Review of Economics*, 1(1):319–354.
- Hubmer, J., Krusell, P., and Smith, A. A. (2021). Sources of US Wealth Inequality: Past, Present, and Future. *NBER Macroeconomics Annual*, 35:391–455. Publisher: The University of Chicago Press.
- Kaplan, G. and Violante, G. L. (2014). A Model of the Consumption Response to Fiscal Stimulus Payments. *Econometrica*, 82(4):1199–1239.
- Kaplan, G. and Violante, G. L. (2018). Microeconomic Heterogeneity and Macroeconomic Shocks. *Journal of Economic Perspectives*, 32(3):167–194.
- Kaplan, G. and Violante, G. L. (2021). The Marginal Propensity to Consume in Heterogeneous Agent Models. page 52.
- Kirkby, R. (2017). Transition paths for Bewley-Huggett-Aiyagari models: Comparison of some solution algorithms.
- Sommer, K. and Sullivan, P. (2018). Implications of US Tax Policy for House Prices, Rents, and Homeownership. *American Economic Review*, 108(2):241–274.
- Werning, I. (2015). Incomplete Markets and Aggregate Demand. NBER Working Paper 21448.