

# Macroeconomics With Financial Frictions and Heterogeneous Agents

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VGSE, Winter 2015/16

We will study a series of recent papers, and will try to reproduce a few of them with (relatively) easy-to-use toolkits.

Grades will be given for a presentation in class and an exam.

1. Asset pricing in macroeconomic models: Mehra and Prescott (1988) Mehra and Prescott (2003),
2. Financial frictions in macroeconomic models:
  - (a) Evidence on the financial crisis: Brunnermeier (2009), Adrian et al. (2013)
  - (b) Agency frictions: Carlstrom and Fuerst (1997)
  - (c) Monetary policy: Gertler and Karadi (2011), Gertler and Kiyotaki (2010)
  - (d) Endogenous risk: Brunnermeier and Sannikov (2014)
3. Bank runs: Diamond and Dybvig (1983), Gertler and Kiyotaki (2015)
4. Liquidity and leverage: Adrian and Boyarchenko (2012), Adrian and Shin (2010), Brunnermeier and Pedersen (2009)
5. Heterogeneous Agents
  - (a) Neoclassical growth model with heterogeneous households: Krusell and Smith (1998)
  - (b) Labor markets with heterogeneous households: Chang and Kim (2007), Takahashi (2014)

## References

- Adrian, T. and N. Boyarchenko (2012). Intermediary leverage cycles and financial stability. Staff Reports 567, Federal Reserve Bank of New York.
- Adrian, T., P. Colla, and H. S. Shin (2013). Which Financial Frictions? Parsing the Evidence from the Financial Crisis of 2007 to 2009. *NBER Macroeconomics Annual* 27(1), 159 – 214.
- Adrian, T. and H. S. Shin (2010, July). Liquidity and leverage. *Journal of Financial Intermediation* 19(3), 418–437.
- Brunnermeier, M. K. (2009, Winter). Deciphering the Liquidity and Credit Crunch 2007-2008. *Journal of Economic Perspectives* 23(1), 77–100.
- Brunnermeier, M. K. and L. H. Pedersen (2009, June). Market Liquidity and Funding Liquidity. *Review of Financial Studies* 22(6), 2201–2238.
- Brunnermeier, M. K. and Y. Sannikov (2014, February). A Macroeconomic Model with a Financial Sector. *American Economic Review* 104(2), 379–421.
- Carlstrom, C. T. and T. S. Fuerst (1997, December). Agency Costs, Net Worth, and Business Fluctuations: A Computable General Equilibrium Analysis. *American Economic Review* 87(5), 893–910.
- Chang, Y. and S.-B. Kim (2007). Heterogeneity and aggregation: Implications for labor-market fluctuations. *American Economic Review* 97(5), 1939–1956.
- Diamond, D. W. and P. H. Dybvig (1983, June). Bank Runs, Deposit Insurance, and Liquidity. *Journal of Political Economy* 91(3), 401–19.
- Gertler, M. and P. Karadi (2011, January). A model of unconventional monetary policy. *Journal of Monetary Economics* 58(1), 17–34.
- Gertler, M. and N. Kiyotaki (2010). Financial intermediation and credit policy in business cycle analysis. In B. M. Friedman and M. Woodford (Eds.), *Handbook of Monetary Economics*, Volume 3 of *Handbook of Monetary Economics*, Chapter 11, pp. 547–599. Elsevier.
- Gertler, M. and N. Kiyotaki (2015, July). Banking, Liquidity, and Bank Runs in an Infinite Horizon Economy. *American Economic Review* 105(7), 2011–43.
- Krusell, P. and A. A. Smith (1998). Income and wealth heterogeneity in the macroeconomy. *Journal of Political Economy* 106(5), 867–96.
- Mehra, R. and E. C. Prescott (1988). The equity risk premium: A solution? *Journal of Monetary Economics* 22(1), 133–36.

- Mehra, R. and E. C. Prescott (2003). The equity premium in retrospect. In G. Constantinides, M. Harris, and R. M. Stulz (Eds.), *Handbook of the Economics of Finance*, Volume 1 of *Handbook of the Economics of Finance*, Chapter 14, pp. 889–938. Elsevier.
- Takahashi, S. (2014, April). Heterogeneity and Aggregation: Implications for Labor-Market Fluctuations: Comment. *American Economic Review* 104(4), 1446–60.