

Macro Financial Modeling Intro

Dr. Richard W. Evans

July 28, 2017

Schedule to the end

Day	Time	Description
Today	8-10am	Nonlinear Opt
	10am-noon	MFM Intro
	noon-1:30pm	RA jobs
Mon	8-10am	Nonlinear Opt
	10am-noon	MFM model
Tue	8am-noon	HPC/Parallel
Wed	8-10am	Nonlinear Opt
	10am-noon	MFM model
Thur	8am-noon	HPC/Parallel
Fri	10-11am	Survey fill out
	11am-noon	concluding remarks

Macro Financial Modeling

Definition:

“**Macro-finance** studies the relationship between asset prices and economic fluctuations.” (John Cochrane, “Macro-Finance”, *Review of Finance*, 21:3, pp. 945-985, May, 2017) [[RoF blog post summary](#)]

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MFM characteristics

Characteristics	Research questions

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Financial capital requirements	Yield curve and recessions

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Firm/household heterogeneity	House prices and recessions
Financial capital requirements	Yield curve and recessions
	Default, bailouts, bankruptcy

Cochrane piece

- John Cochrane, “Macro-Finance”, *Review of Finance*, 21:3, pp. 945-985, May, 2017)
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- Key mechanisms:
 - Habits, persistence: Epstein-Zin prefs, minimum consumption
 - Long-run risk, rare disasters
 - Idiosyncratic risk
 - Heterogeneous preferences
 - Intermediary asset pricing/borrowing constraints
 - Investor irrationality and belief heterogeneity

Brunnermeier reading list and BFI

- Brunnermeier Macro-finance reading list

Brunnermeier reading list and BFI

- Brunnermeier Macro-finance reading list
- BFI Macro Financial Modeling Initiative
 - starting repository of macro-finance models

4 papers

- 1 Richard W. Evans, Laurence J. Kotlikoff, and Kerk L. Phillips, “[Game Over: Simulating Unsustainable Fiscal Policy](#),” Fiscal Policy After the Financial Crisis, eds. Alberto Alesina and Francesco Giavazzi, National Bureau of Economic Research, University of Chicago Press (2013).

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- ④ Viktor Tsyrennikov, **Discrete time version of Brunnermeier-Sannikov (2014)**
 - See also Rappaport and Walsh, “[A Discrete-time Macroeconomic Model with a Financial Sector](#),” (2012).