Motivation

- Financial crises occur periodically (Kindleberger, 1993)
- Financial frictions drive business cycle
  - Fisher (1933), Keynes (1936), Gurley-Shaw (1955), Minsky (1975)
- Financial sector helps to
  - overcome financing frictions and
  - channels resources
  ... but
  - Credit crunch due to adverse feedback loops & liquidity spirals
  - Credit flow/risk matters! Not only money
    - Friedman-Schwartz (1963)
Pre-crisis view:

- Single target
  - Price stability ≈ stable output

- Single instrument
  - Monetary: interest rate
Monetary + Macroprudential Economics

- Pre-crisis view:
  - Single target
    - Price stability \( \approx \) stable output
  - Single instrument
    - Monetary: interest rate

- Post-crisis view
  - Multiple targets
    - Price stability
    - Financial stability
  - Multiple instruments
    - Monetary
    - Macro-prudential
      - Capital/leverage ratios
      - Liquidity mismatch
      - Haircuts
      - Bank levy
      - Capital controls
      - ...

Policy makers need answers!
What’s needed?

- Macroeconomic models that incorporate
  - Financial frictions
  - Financial sector

- to evaluate new policy measures
  - Interaction between monetary and financial stability

- to design financial architecture
  - Domestic and international

- “Macro meets Finance”
One profession – two confliction views

Macro (core)
- 3 wedges/frictions
  - TFP
  - Labor large!
  - Capital small!
- Complete markets + no fin. frictions
- Representative agent analysis
- Financial sector is a veil

Finance (corporate)
- Large and significant financial frictions!
  - Asymmetric information leads to
    - Credit rationing!
    - Interest rate spreads
  - Liquidity hoarding
- Distribution of wealth matters!
- Financial sector mitigates these frictions
  ... but introduces instability
Instability, systemic risk, liquidity, ...

- e.g. what’s systemic risk? - how to measure it? (OFR)

- Systemic risk build-up during (credit) bubble ... and materializes in a crisis

- Spillovers – externalities
  - Direct contractual: domino effect (interconnectedness)
  - Indirect: price effect (fire-sale externalities) credit crunch, liquidity spirals, haircut
Main economic phenomena

- Amplification
  - Small technology shock leads to large drop in output
- Persistence
  - Temporary shock leads to persistent decline in output
- Volatility dynamics - instability
  - Uncertainty increase leads to precautionary hoarding ...
- “excessive” savings/liquidity hoarding to self-insure
- Role for money
- Welfare
  - Spillover effects and constrained Pareto inefficiency
  - Dynamic inefficiency
Frictions vs. Belief Distortions

- What caused the (credit) bubble ... crisis?
- Incentive distortions vs. hybris?

- Welfare analysis
  - Frictions
    - Externalities, ...
  - Belief distortions (optimists vs. pessimists)
    - What’s the right welfare benchmark?
Conclusion

- Crisis raised many questions
  - Academically/conceptually interesting
  - Guidance for policy making is needed

- New methods/tools allows modern quantitative treatment
Thank you! 😊