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# Do We Need the Government to Run a Good Financial System?

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# Government/Banking Nexus

- ▶ Four pillars of traditional financial intermediation:
  - ▶ loans
  - ▶ deposits
  - ▶ DI and LOLR
  - ▶ prudential supervision/regulation
- ▶ Financial system as public-private partnership
- ▶ Feature or bug?

# Normative Mechanism Design Approach

- ▶ Normative mechanism design approach to financial system
- ▶ Market failures and 2nd best constrained efficiency
- ▶ Perspective with far-ranging implications in different contexts:
  - ▶ destabilizing effects of shadow banking
  - ▶ architecture of IMS
  - ▶ doom loops and design of banking unions
  - ▶ ...
- ▶ Branch out of organizing framework of Farhi-Tirole (17)

# Deep Relation to Diamond and Kiyotaki-Moore

- ▶ Approach:

- ▶ microfoundations
- ▶ mechanism design

- ▶ Ideas:

- ▶ banks as delegated monitors, securities holders, and deposit takers, with agency problems in Diamond (1984)
- ▶ deposit insurance to prevent runs in Diamond-Dybvig (1983)
- ▶ interaction inside/outside money in Kiyotaki-Moore (2018)

# LOLR and Deposit Insurance as Outside Liquidity

- ▶ LOLR and DI as outside liquidity:
  - ▶ ex-ante priced insurance against ex-post tail risk
  - ▶ different from ex-post bailouts
- ▶ Alleviate aggregate inside liquidity shortages  
(limited pledgability, runs/incomplete markets/aggregate risk)
- ▶ Government comparative advantage from unique fiscal powers  
(Holmstrom-Tirole 1998)

## Two Complementarities

- ▶ Complementarities via fiscal externalities from moral hazard:
  - ▶ LOLR and supervision/regulation
  - ▶ DI and supervision/regulation
- ▶ Economies of scope in supervision/regulation
- ▶ Other rationales for supervision/regulation:
  - ▶ (non-systemic) protection and representation of consumers
  - ▶ (systemic) pecuniary externalities (fire sales) and aggregate demand externalities (Keynesian), see Farhi-Werning (2016) for unified theory

# Shadow Banking

- ▶ Option to migrate to shadow banking
- ▶ No LOLR, no DI, no supervision/regulation
- ▶ Ex-ante moral hazard and ex-post bailouts (limited commitment of government)



# Interrelations Banking/Shadow Banking

- ▶ Many interrelations banking/shadow banking
- ▶ Liquidity/risk sharing and provision
- ▶ Alternative strategy to back safe/liquid deposits: liquid assets sold to regulated banks in case of “runs”, leading to “fire sales” (Hanson-Shleifer-Stein-Vishny 15)

## Destabilizing Effects of Shadow Banking

- ▶ Participation/incentive constraint ... rents to regulated banks
- ▶ Liquidity syphoning and bogus liquidity ... structural remedies (ring-fencing and CCPs)
- ▶ Runs, pecuniary and aggregate demand externalities (Shleifer-Vishny 92, Lorenzoni 08, Stein 12, Farhi-Werning 16, Davila-Korinek 17,...)
- ▶ Fiscal externalities, (collective) moral hazard and (systemic) bailouts (Farhi-Tirole 12)
- ▶ Extend domain of regulation to shadow banking?
- ▶ Also benefits: competition, innovation, yardstick ...

# Governments as Bankers and the IMS

- ▶ Reserve countries as banks supplying safe assets to RoW
- ▶ Few large issuers, monopoly (US) or duopoly (US + UK in 20s, US + China in future?)
- ▶ Farhi-Maggiore (2018): model of IMS combining financial intermediation theory + IO imperfect competition + international macroeconomics

# Bretton Woods and Triffin Dilemma

- ▶ Increased demand for reserve assets under Bretton Woods
- ▶ Two opposing views:
  - ▶ Triffin dilemma (61)
  - ▶ “world banker” view of Despres-Kindleberger-Salant (66)
- ▶ World banking is fragile: self-fulfilling runs ... shift monetary to fiscal dominance ... devaluation ... loss of reputation
- ▶ Even with flexible exchange rates and large private capital flows ... new Triffin dilemma (Farhi-Gourinchas-Rey 11, Obstfeld 11, Farhi-Maggiore 18)

## New Triffin Dilemma and Architecture of IMS

- ▶ World banking fragile ... new Triffin dilemma (no LOLR/DI for reserve issuers)
- ▶ Safe asset shortage, high risk premia, low interest rates, ZLB (no outside liquidity)
- ▶ Monopolist world banker might over-issue and risk crisis (no regulator)
- ▶ Instability from multipolar vs. unipolar by exacerbation of coordination problems (Nurkse 1944) and loss of discipline from erosion of franchise value despite benefits of competition (US+UK in 20s, US + UK in future?)
- ▶ International risk sharing and LOLR to reduce demand for safe assets (IMF, central bank swap lines)?
- ▶ Future of IMS? Special role of the dollar?

# Conclusion

- ▶ Normative mechanism design approach to financial system
- ▶ Theory of government/banking nexus: features and bugs
- ▶ Far-ranging implications in different contexts:
  - ▶ destabilizing effects of shadow banking
  - ▶ architecture of IMS
  - ▶ doom loops and design of banking unions (Farhi-Tirole 17)
  - ▶ ...