Deposit Insurance without Commitment by Russell Cooper and Hubert Kempf Discussion

Leopold von Thadden
University of Mainz and ECB (on leave)

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General remarks

- This is an innovative and exciting paper
- It is fun to read and it is very carefully done:
  but read it slowly, ie Proposition by Proposition...
- The main message is clear and invites for some comments and follow-up questions

Summary of the paper

We have seen that during the crisis not all troubled banks have received an ex-post **bail-out**...

$\longrightarrow$ What determines the provision of **deposit insurance** without commitment in a Diamond-Dybvig economy with heterogenous HHs?

According to CK, there is a crucial trade-off to be examined:

- **Gains** from ex-post deposit insurance, because of **risk sharing**
- **Costs** to ex-post deposit insurance, because of possibly undesirable **redistributions between heterogenous households**
  ($\longrightarrow$ to be discussed: at least 4 margins of redistribution matter)

Summary of the paper

Main findings:

- **Balance between costs and benefits** in decentralized settings (where HHs differ in their claims against banks and deposit insurance to be financed through the tax system) a priori **open**
- Moreover: even if gains from offering ex-post deposit insurance dominate, in decentralized settings this does not automatically rule out runs from an ex ante perspective
- Claim: such differentiated findings help to understand recent diverse reactions of regulatory authorities

Summary of the paper

Features of the economy:

Diamond-Dybvig set-up with heterogenous HHs:

- HHs differ in their **endowments** α^0 (observable)
- HHs differ in their **preferences** (not observable)
  after savings decisions have been taken, HHs realize whether early or late consumers
- Late consumers tempted to consume early if they fear a run
- 2 investment technologies: short-term (low return) and long-term (high return)
- If there is a run, shortage of short-term investments and valuable long-term investments to be liquidated (which is costly)

$\longrightarrow$ notice: heterogeneity in endowments maps via savings into heterogeneous claims against banks

Summary of the paper

Social planner (benchmark):

- can implement contracts based on α^0, but not on preferences
- allocations must be incentive compatible
- individual weights in social welfare possibly depending on α^0

Outcome:

- Planner can decouple insurance and redistribution elements by implementing type-specific allocations
- For **optimal allocation:**
  $\longrightarrow$ deposit insurance will be offered ex post
  $\longrightarrow$ truth-telling of late consumers is the dominant strategy
  $\longrightarrow$ and runs will never take place
- **Special case:** welfare weights of individuals independent of α^0
  $\longrightarrow$ identical consumption across agents
  $\longrightarrow$ complete redistribution along with optimal risk sharing

Summary of the paper

Deposit insurance in decentralized settings:

- Banks compete in (zero-profit) type-specific deposit contracts and investment plans
- Deposit insurance to be fully funded via tax system

$\longrightarrow$ Emergence of a **trade-off** between **insurance against the consumption risk under a bank run** (at any level of deposits!) and unfavourable **redistribution between households**

Summary of the paper

Deposit insurance in decentralized settings:

Extent of redistribution depends on:
($\rightarrow$ *for details, see Propositions 2-9...*)

1) Availability of **Lump-sum** vs. **type-specific taxes**

2) Ex ante vs. **ex post** design of (type-specific) **taxes**

3) Systemic (economy-wide) runs or **partial** runs (subset of banks)

4) Social welfare weights of intervening authority which offers deposit insurance

Summary of the paper

Deposit insurance in decentralized settings:
Some intuition:

$\longrightarrow$ Assume the vector $\boldsymbol{\alpha}^0$ allows for dispersion in endowments of HHs
$\longrightarrow$ Recall that concavity of individual consumption $v(\overline{\alpha} + x(\alpha^0))$ is preserved in aggregate welfare $\int \omega(\alpha^0) \cdot v(\overline{\alpha} + x(\alpha^0)) \cdot f(\alpha^0) d\alpha^0$

- **Redistribution costs** of deposit insurance will be **largest** under a scheme of **lump-sum taxes** which funds a **systemic run**

Why?
$\longrightarrow$ Under a systemic run the overall need for funds is largest
$\longrightarrow$ Lump–sum taxes preserve the distribution of unequal claims against the banking system
$\longrightarrow$ These claims against banks are proportional to deposits (ie not lump-sum)
$\longrightarrow$ Deposit insurance funded by lump-sum taxes induces a mean preserving spread in consumption which reduces welfare

Summary of the paper

Deposit insurance in decentralized settings:

- **Redistribution costs** will be **mitigated**
  - under an ex ante **progressive tax system** (type-dependent, ie taxing high $\alpha^0 s$ more strongly than small $\alpha^0 s$)
  or
  - if there is only a **partial run** (which introduces a second dimension of redistribution between households independent from endowments, namely whether deposits of HHs are exposed to a run or not)
- **Redistribution costs** can be **eliminated**
  under a type-dependent **ex post scheme of taxes**
  (since the gov't can then undo any undesirable redistribution coming from deposit insurance)
- **Redistribution costs** will be **reinforced**
  if the government uses a non-Utalitarian social welfare function which places sufficient weight on poor HHs

Summary of the paper

Deposit insurance in decentralized settings:

Assume: benefits from providing ex post deposit insurance dominate over redistribution costs

$\longrightarrow$ **How to prevent runs?**

- Liquidation decision of long-term investment not to be taken by banks...
- ...but to be transferred to the authority which provides deposit insurance and designs the ex post tax scheme
- Such comprehensive scheme mimics the allocation of the social planner, ie the promise to provide DI is credible and the bank run is eliminated

Comments

Comment 1: Deposit insurance vs. bailing out banks?

- In the model, ex post insurance of deposits and 'bail-out of a bank' are the same
- In reality DI covers a fraction of bank liabilities, and only up to certain limits
  why? $\longrightarrow$ to limit redistribution effects
- Extra problems arise if you try to insure all bank liabilities
  $\longrightarrow$ see Irish example, ie Irish taxpayers understand that redistribution effects are large if there is no bail-in of bank creditors

$\longrightarrow$ Focus of the paper seems to be on bail-out of banks...

Comments

Comment 2: Bailing out small vs. large banks?

- Prediction of the model: redistribution costs increase in magnitude of the run (=size of banks), ie
  bail-outs to be concentrated in small banks
- If so, how to account for bail-out of AIG (but not of Lehman, and many small banks) ?
- What are the redistribution effects from saving large systemic banks?
  $\longrightarrow$ over time, $\boldsymbol{\alpha}^0$ should be endogenous, ie poor HHs may well loose out if the collapse of systemic banks triggers a recession and lay-offs
  $\longrightarrow$ trade-offs may be more complex than assumed in the paper, as long as there exist banks that are 'too big to fail'

Comments

Comment 3: Bailing out banks vs. countries?

$\longrightarrow$ What about the conference topic?

- Bail-out of **large banks** is a particular problem in **small countries**...
- ...leading to unpleasant **fiscal** dynamics...
- ...in the euro area so much so that it may lead to a bail-out of countries?

Comments

Comment 3: Bailing out banks vs. countries?

Idea: to understand this better, merge the agenda of this paper with CKP (2008) on regional debt in a fiscal federation

CKP (2008):

- 2 regions and in each of them: single representative HH
- benefits from bail-out (via federal gov't): tax smoothing between regions
- costs of regional bail-out: excessive debt issuance

$\longrightarrow$ add to this: heterogeneity of HHs and **distributional concerns within regions**
$\longrightarrow$ this will modify trade-offs of CKP (2008) and bail-out of regions may be less compelling?