Capital Regulation, Liquidity Requirements and Taxation in a Dynamic Model of Banking

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Discussion by

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This paper

- model of risk-taking of a single-bank
- excessive risk-taking arises due to limited liability and the presence of insured deposits
- novelties:
  - comprehensive means to resolve distress: fire-sales of assets, bond issuance and equity issuance
  - joint analysis of capital regulation, liquidity requirements and taxation
    - taxation: distinguishes between income and liability taxation
  - fully dynamic model

Key results

- calibration of model yields following results:
  - modest CR improve lending and welfare, while excessive CR reduce welfare
  - liquidity requirements are welfare reducing
  - taxation generally reduces welfare and liability taxation even increases the probability of default

Nice paper!

- comprehensive analysis of bank risk-taking
- has all the right ingredients!
- careful and diligent analysis
- interesting results.

=> useful tool for evaluating real world policies

Suggestions

- develop intuition behind results (many numerical)
- structure more the results: which results are "expected" and which are surprising and novel?
- discuss what do we gain by using full-fledged setup?
- put more in perspective with current policy debates (the paper well suited for this).

Intuition

- Why does capital regulation increase bank lending? Normally this works the other way around
- Why does capital regulation increase the efficiency of bank? Would have expected that unregulated bank maximizes its own efficiency.
- Why does taxation increase the risk of default? Would think that taxation reduces level of bank activities and that this reduces bank risk. Important point for policy debate.

Presentation of the results

Which results are novel and surprising and which are not?

Examples:

- Standard: optimal capital requirements
- Novel: (modest) capital requirements increase lending
- Standard: taxation reduces lending and increases tax receipts
- Novel: taxation increases default

Efficiency notion

- Notion of bank efficiency: market value of assets less bond holdings
- Seems more concept of *surplus* than *efficiency* (efficiency=how much can be generated with given resources)
- Shouldn’t we also deduct cost of equity? If bank just makes loans that have return equal to cost of capital, no value is created

Endogenous maturity structure

- Standard literature: risk-taking through *amount* of loans
- In this paper risk-taking has second dimension: *maturity* of loans

Is there also excessive risk-taking in the sense that bank chooses too long maturity?

General equilibrium

- Some of the results may change in general equilibrium. Should be discussed.
- An example: taxation
  - If banks uniformly face higher taxes, they may be able to pass onto customers and their business may then not be very much affected
- Evidence: Huizinga, Voget and Wagner (2011):
  - Identify differences in taxation through double taxation
  - Find almost full pass-through of corporate income taxes by banks

Other comments

- Monitoring costs only incur for new loans. Perhaps interpret as screening costs?
- Fire-sale costs are increasing at the individual bank level. Possible interpretation: bank first sell most liquid parts of assets
- Tax shield from losses only has value if bank makes profits in future. Will not be the case close to solvency. Implication for results?

Smaller points

- Cost of issuing equity for banks may be more appropriately characterized in banking context by agency cost and not flotation costs
- Page 13: valuation of bank in bankruptcy was not fully clear to me. What is interpretation of given definition?
- Page 15: How does definition of welfare proxy differ from real welfare?
- Bankruptcy costs are set to 10%. Older estimates in (James, JF 1990) might suggest higher numbers.

Nice model that has all the necessary ingredients to understand impact of regulation on bank risk-taking

Results are interesting and some not at all standard.

Push Paper further:

- Intuition
- Placement of the results
- Tie more with the policy debate