Credit Cycles, Credit Risk and Countercyclical Loan Provisions

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Discussion

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Research Questions

1. Do loans granted during periods have a higher probability of default than those granted during periods of slow credit growth?
   – Lower lending standards in booms

1. Do countercyclical loan provisions mitigate the amplitude of the credit cycle?
   – Boom: Extra capital (Tier 2) → reduce risk taking incentives
   – Recessions: Extra buffer → reduce credit rationing

Colombia
2003-2011

Answers

1. Do loans granted during periods have a higher probability of default than those granted during periods of slow credit growth? YES
   - Lower lending standards in booms

1. Do countercyclical loan provisions mitigate the amplitude of the credit cycle? YES
   - Boom: Extra capital (Tier 2) → reduce risk taking incentives
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Colombia

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My Comments

- Paper is still developing. My comments geared towards how to best help develop it further:
  - More Information
    - Put things in context, understand and improve analysis
  - Identification
  - Additional things to look at
    - Important questions, especially the second one. Dig deeper.

More Information

- Macroeconomic conditions during the sample period.
  - E.g., Was Colombia affected by the recent financial crisis? How?
- Main characteristics of the Colombian banking sector and its condition during the sample period
  - E.g., competition, foreign banks & entry, government banks
  - E.g., reforms that may be affecting time-series (or even cross-sectional) variation
- More information about the credit registry data
  - E.g., Frequency? Entire loan spell? Borrower's credit history? Information sharing? Internal ratings?
- More information about the reforms used in the analysis

Identification (1)

- The paper will benefit from a more explicit discussion of its identification strategy
  - E.g., What variation are you exploiting? What confounding factors do some of your controls help you remove? What remains a challenge?

- Take the first research question:

- $$Pr(Default_{l,b,t+k}) = F(a + b_1{*}GrLoanDev_{bt} + b_2{*}|GrLoanDev_{bt}| + c_1{*}Loan_{lt} + c_2{*}BANK_{lt} + c_3{*}Borrower_{it} + e_t + n_i) \quad (1)$$

- l = loan, b=bank, t=time, k=# of years since granted, i=borrower

- If expansions are more likely to be followed by downturns then you would get a b>0
- Should you introduce time-fixed effects? Currently: gdp growth and interest rate.
- Do the data allow you to introduce ex ante measures of risk taking?
  - E.g., Borrowers' credit histories, (internal and external) borrower ratings
- Why do you control for borrower characteristics and firm fixed effects?
- Should you have bank fixed effects? Is there strong foreign bank entry?
- Should you in subsequent specs allow for interactions with bank characteristics that correlate with agency problems?
- Do the data allow you to estimate a hazard model?
  - E.g., do you observe the entire loan spell

Identification (2)

- Now take the second question:
- $Ln(Loan)_{q,l,t} = a + b*Treatment*\ Characteristics_{q,l,t} + e_{q,l,t}$ (2)
- q=q-percentile, l=loan, t=time
- treatment = 1 if credit granted during 2007.3 and 2011.2, and 0 otherwise
- Characteristics = a vector of interactions ??
- Sample of loans used was unclear to me
  - Generated using a matching methodology. Matching on a propensity score that estimates the probability that a given loan will be assigned to a treatment (with countercyclical provisions) or a control group (without countercyclical)
  - The authors write: *"The resulting matched credit make up a set that reflects a synthetic situation in which there is a loan market of exactly the same characteristics before and after 2007"*

Identification (3)

- What problem are you trying to solve with matching?

- Why not using the methodology used in Jimenez et al. (2012) for the Spain? The authors study how banks that were differently affected by the countercyclical provision reforms change their lending to the same firm at the same calendar time

- As I understand also in Colombia the countercyclical provisions in Colombia had a differential impact on different banks

- Discussion in Fernandez de Lis and Garcia-Herrero (2010) also suggests that procedure as to which bank qualifies described in Appendix A did not apply from the beginning but that was introduced later. The analysis seems to assume that whatever was introduced in July 2007 holds for the entire period. Is the subsequent reform inside your sample period?

- More importantly can you use it for identification in the spirit of Jimenez et al. (2012) who also exploit subsequent reforms in the countercyclical provisions in Spain to establish identification?

Additional things to look at

- Current results are largely in line with the existing literature.
- I urge the authors to think further what may be special about Colombia's banking sector or the characteristics of the reform that could allow you to draw new insights on these very important questions.
- Beyond this I would also urge the authors to take the analysis with respect to the second question a step further and try to understand possible credit allocation effects with respect to both banks and firms and across different stages of the business cycle.
  - For the latter the short period maybe restrictive but regional or industry variation may be possible to be used.

Conclusions

- I think the paper deals with very important questions.
- Evidence from different samples and settings could be useful in forming informed opinions about important policy debates.
- I urge the authors to develop this paper further.
- Looking forward to seeing updated drafts in the future.