DISCUSSION

An empirical assessment of the risk-taking channel

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Discussion by

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Basel

How Does Monetary Policy Affect Credit?

- **The classical *interest rate channel* (demand channel): cost of capital declines with monetary expansion, leading to more investment and consequently more credit**

- **The *credit channel***
  - The *balance sheet channel:* Lower levels of interest rates increases borrowers' net worth, which reduces agency frictions and allow more credit to flow toward firms
  - The *bank lending channel*: As the bank is also a borrower, bank's balance sheet conditions matter for the transmission of manetary policy. In particular, the effect of interest rates on bank loan supply is stronger for banks with higher net worth

- **The *risk-taking channel*: banks take more risk when monetary policy is expansive**

Objective and main findings

- **This is an empirical paper with the purpose to test the risk-taking channel of monetary policy. Needless to remark the importance of this analysis in light of recent events**
  - The study is nicely performed using an international bank level dataset of listed banks
- **They find that:**
  - There is a strong link between monetary policy and bank risk, which supports the risk-taking channel theory

Data and Methodology

- Database: A sample of listed banks from 15 different countries
- The bank’s balance sheet information is extracted from Bloomberg
- Frequency: quarterly information from 1998 to 2008
- Methodology: GMM estimation method where the main measure of bank risk is the Moody’s expected default frequency (EDF)

Comments

- **Highly relevant paper for banking regulators and supervisors**
  - They find evidence on the risk-taking channel at global level
  - They find support to previous micro studies at country level: Jiménez, Ongena, Peydró and Suarina (2009) for Spain; and Ioannidou, Ongena and Peydró (2009), for Bolivia
- **They estimate an impeccable econometric model although some improvements and extensions would make the paper richer and more convincing**

- **Essential ingredients in the empirical strategy**
  - –A dataset at loan level: *Spanish Credit Register*
  - –An exogenous MP: *German interest rate*
  - –A measure of bank credit risk-taking:

Ex-ante

- *We use probit models to know whether a new loan is granted to*

–A borrower with a good or bad recent credit history (related to risk)

–A borrower with a without credit history (which is related to uncertainty)

Ex post

- *We employ a dynamic methodology (duration models) to analyze the impact of short-term interest rates prior to loan origination on prior to the time of default of each individual bank loan*

Jimenez, Ongena, Peydró and Saurina, 2009
Findings

- **We find that banks soften their lending standards with lower interest rates**
  - –They lend more to borrowers with a bad credit history and with higher uncertainty
- **More importantly, we also find evidence of the duality of interest rates:**
  - –Credit risk increases with lower interest rates at loan origination
  - –But also increases as a result of higher rates during the life of the loan, i.e., conditioning on the loan being granted, lower rates reduce the credit risk of outstanding loans
- **We find that risk-taking is not equal for all type of banks**
  - –Small banks and more liquid banks take on more extra risk than other banks when interest rates are lower
- **Moreover, for the same borrower small bank finance increases disproportionately relative to big bank finance. This rule out demand story and highlight the role play by banks**

Comments
Data

- **The database contains information about 15 different countries and 643 listed banks**
  - From a micro level point of view, results are economically significant but from a macro level it is not possible to know their global impact. I think that it would be useful to see the share of the considered banks within their countries: CR3 or CR5 (for instance, in terms of total assets)
- **Authors treat mergers reconstructing backward the merged banks**
  - This kind of practice is in some sense artificial as it creates a new bank there where two different banks were working. This can infra-estimate your results if risk-taking affects more to smaller banks (as in Jiménez et al, 2009): in the aggregate, the expected results can disappear if banks involved in the merger do not have a similar size
    - *I would prefer to create a new bank after the merger*
  - What happends with a bank that merge with a non-listed bank? Are only mergers considered within the sample of banks used?
- **Table 3: It would be nice also to see the statistical significance of the difference, Δ**

- Authors estimate the following dynamic model using the GMM technique:

$$\Delta EDF_{bct} = \alpha \Delta EDF_{bct-1} + Controls_{t,t-1} + \eta_b + \varepsilon_{bct}$$

- I would like to know what variables has been considered exogenous/endogenous and what lags have been used in their estimation (at least for the lagged LHS variable)

- Have you try to estimate the baseline model without the lagged endogenous variable? If the autocorrelation is low can be captured by the bank fixed effect and thus the effect of all variables would be higher

Comments
Econometric section

- In Model III of Table 4 housing prices and stock return are introduced, but this variables can be very correlated with GDP and this could be behind the positive coefficient on HP. A correlation matrix between covariates would be very useful

- In the paper “Credit cycles, credit risk, and prudential regulation” by Jiménez and Saurina (IJCB, 2006), authors find evidence of a direct, although lagged (around 3 years), relationship between excessive credit growth and credit risk. Have you tried to include more lags (at least up to 1 year) of the TGAP variable?

Exploiting cross-country variation

- Weak bank supervision has been suggested as one of the factors behind the current crisis. To control for this (and other) country specific characteristics it would be good to run a regression with country dummies. This also will rule out as much as possible the country effect in the coefficient on ΔTGAP and will reduce avoid bias in the estimated standard errors

- In Model VII of Table 4 authors control for the excesive growth introducing the difference between bank's credit growth and the mean of the growth for all the other banks in that quarter. Given the high heterogeneity among countries, I would prefer to introduce the difference with respect all the banks in the same country

Too-low-for-too-long theory

- As some academics have suggested, too low interest rates during a too long period may increase bank's appetite for risk

- This paper finds evidence in favor of the too-low level of interest rates. Is it possible to analyze the too-long leg? For instance, with a time-varying variable counting the number of periods with negative values of TGAP in the last two/three years

- What about to introduce the interaction between both legs?

Comments
Econometric section

- **Exploiting bank variation**

  - As I have commented, a very important result of Jiménez at al. (2009) is that the effect of interest rates are bank dependant: bank-risk taking is more important for small banks during expansive monetary policy periods

  - I invite you to introduce interaction effects between bank characteristics and TGAP. I think these cross effects would enrich the paper

Conclusions

- **This paper addresses nicely a very relevant topic: does monetary policy have an impact on the bank's incentive to take more risk?**

- **Using an international bank level dataset of listed banks they find evicence in favor of the risk-taking channel theory:**

  - Accommodative monetary policy reduce risk perceptions and hence introduce more risk in the portfolios of banks

- **With my comments I have tried to contribute to a work in progress paper that I am sure that will become a reference in this field**

THANKS FOR YOUR ATTENTION