FEDERAL RESERVE BANK *of* CLEVELAND

Bank Lending and Lending to Banks: Discussion of BPS, BG, and GJKU

Discussion by Mark Carey

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Internal Loan Ratings, Supervision, and Procyclical Leverage

by

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My takeaway

Innovative method for measuring bias in loan ratings is not yet convincing

Banks' ratings of loans are too optimistic

- Novel Markov-chain method of measuring ratings inflation
  - In the steady state Drift = 0 in

    $R_{i,t} - R_{i,t-1} = \text{Drift} + \varepsilon_{i,t}$
  - Claim: If Drift ≠ 0 then bank is mis-rating
- Finding: Drift > 0, implies about 7% worsening of rating per year.
- (Unbiased) examiners correct the misrating for loans they review, and bank learns from the corrections and reduces misrating of similar loans
- Misrating is partly responsible for procyclical leverage

I am skeptical about key assumption

- Borrower credit quality (and thus rating) in real-world samples is probably not in the steady state
- Major problem: Borrowers select when they refinance
  - Almost all firms have a loan relationship
  - Almost all loans are floating-rate plus a spread and can be refinanced without penalty
  - Borrower minimizes spread by waiting until the combination of market and borrower conditions are unusually good and then refinances to a low spread
  - So we should expect ratings to worsen
  - And by the way, these are point-in-time ratings

I am skeptical about key assumption (2)

- Paper says nothing about how loans that enter and drop out of the sample are handled. Survivorship? Truncation?

- Minor problem: Sample ratings lump all firms AAA through B-ish into one grade (Pass), then distinguish B-minus-ish and risker into four grades. Borrower condition in those four grades is unusually volatile.

- **Method is an innovation**. E.g. Plosser and Santos (2018) compare risk measures across banks; also subject to selection problem. It’s just that this paper’s argument is not yet clear or complete enough.

Nitpicks

- The bank’s incentive to avoid criticized status is unusually strong…many regulatory triggers are influenced
- Examiners have an incentive find something
- Disagreements about individual ratings are common (I found that among insurance company private placement portfolios)
- Why not use full range of ratings (e.g. PDs like Plosser and Santos (2018))?

Overall

- Innovative paper
- The argument just needs to be strengthened. Maybe authors can address the selection problem
- Procyclical leverage feels like a distraction from the innovation

Adverse Selection in Central Bank Lending: An Empirical Analysis of the Federal Reserve's Primary Credit Program

by

Meldi Beyhaghi

Jeffrey Gerlach

My takeaway

Convincing evidence that there has been no discount window stigma since the 2003 change in operating procedures

Stigma?

- For decades the folk wisdom has been that banks under funding pressure avoid borrowing from the discount window because they fear the public will receive a negative signal and then run
- The paper provides compelling evidence that, under the current discount window operating regime, stigma does not exist
  - The authors have constructed crucial data
- Robust secrecy about primary credit loan might be the reason (but if so, why abnormal return?)
- Also provides evidence that supervisors do not downgrade following primary credit borrowing

Why do banks continue to fear stigma?

- Evidence about that would be difficult to develop since it's about motivation for inaction
- I speculate:
  - Lack of evidence of no stigma – this paper will help
  - Strategic behavior: Telling the official sector they fear stigma increases the likelihood that favorable funding programs will be created during stressed states of the world, increasing profits

Particularly nice findings

- Publicly traded banks experience **positive** abnormal returns following primary credit borrowing
- The perception is unfounded that the public can infer the identity of primary credit borrowers that are large banks from weekly Reserve Bank aggregate disclosures
- Nice diff-in-diff identification strategy involving differential access of Fed and non-Fed supervisors to discount window information

Suggestion

- It is possible that market participants distinguish the mass of banks from those that look particularly weak
  - Divide the GFC sample into those that look weak according to one or more characteristics, for example:
    - Share of mortgages (esp. non-prime) in assets
    - NPL ratio
    - Share of uninsured deposits
    - Leverage ratio
- Do the riskiest N have a negative excess return?

Overall

- Very important paper
- Clean and clear

Specialization in Banking

by

Kristian Blickle

Cecelia Parlatore

Anthony Saunders

My takeaway

- Potentially very important paper about the importance to loan credit risk of bank specialization in lending to one or two industries, but many important elements of the paper are unclear in this draft

(Many?) Large banks have loan portfolios that are overweight in one or a few industries

- The top two industries in the average bank's portfolio occupy about 13 percentage points more of the portfolio than borrowers in other industries
- Attributed to information specialization by banks
  - Both screening and monitoring are considered
    - Not persuaded that the two are empirically separated
  - The usual bevy of variations is considered, e.g. Petersen and Rajan's (1995) argument about lock-in
- Loans to firms in favored industries are less likely to become nonperforming and have lower interest rates
  - But the sample does not include a period of wide credit distress, so the evidence is more about expected loss than bad-tail loss (the latter is what diversification is about…the sample does not support evidence whether profits will suffer in bad states of the world)

The results are robust but not yet convincing

- Effect on default too big to be credible
  - For reference, long-run average 1-year agency PD for BB-rated is about 0.6 percent (S&P), similar to reduction of about ½ percentage point in NPL rate that is associated with borrower in industry of specialization. Huge effect.
  - Average NPL rate in the sample is 5 percent!
  - What are the units and time period of the measure of default? Seems to not be a one-year PD, but if not, what? Details important to interpretation.
- The bank knows it is benefiting from the specialization, but with such a huge effect the specialization should influence internal credit ratings, and yet **rating dummies do not alter the effect. Why not?**
  - More information about the ratings in the data is needed. Are they only Pass + criticized grades? If so, "specialization" is standing in for credit quality.

More that would be nice to find in the paper

- Are all banks specialized? Are all specialized in a different industry than other banks? To what extent is specialization a result of bank location combined with industry location? To what extent is specialization driven by a small number of large loans? How many industries are not served by a specialized bank (only 40ish banks in sample)?

I am stretching for an alternative explanation

- A) Any firm can get a loan (though not all can from banks). It's almost entirely about the interest rate. And the market is very competitive
  - A bank can make more loans to safer borrowers
    - Ratings, but also portfolio risk (correlations)
- B) The bank has a much stronger than usual incentive to evergreen troubled loans in the industry of specialization
  - It will want to avoid a large increase in overall NPLs
  - The favored industry almost surely has powerful proponents within the bank's bureaucracy. Denial about risk is likely

Nitpicks:

- The data provide interest rates, not interest rate spreads, but it is the spread that compensates the lender. Can you estimate and use spreads? Do the data include an indicator for a LIBOR floor?
- The paper has been around awhile and shows signs of being referee-ized, meaning a large number of alternative explanations are described and analyzed so briefly that the arguments are unpersuasive, damaging the credibility of the paper

Overall

- This is potentially an extremely important paper
- I urge reading the next draft, not the current draft

Wrapping up

- Three nice and important papers. I'm grateful for the opportunity to discuss them
- I urge you to take a look