

Balance Sheet Risks

Discussion by

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Discussion of “Deposit Inflows and Outflows in Failing Banks” by Martin, Puri, and Ufier

- ▶ The innovation of this excellent paper is its use of detailed daily account-level deposit data on a (small) failed bank.
- ▶ The finding that uninsured term-deposit funding was the first to run is consistent with distressed (*healthy*) large banks' loss (*gain*) of term CDs during the recent crisis (Pérignon, Thesmar, Vuillemeys *JF*, 2018).
- ▶ The general finding that distressed banks replace uninsured funding with insured funding is also previously documented:
 - ▶ large banks following credit rating downgrades (Billet, Garfinkel, O'Neal *JFE* 1998).
 - ▶ small banks during the recent crisis (Bennett, Hwa, Kwast, *JFS* 2016).

Internet Listing Service Deposits

- ▶ The paper's most important discovery is the regulatory loophole of insured, institutional deposits provided by listing services.
- ▶ Listing service deposits are not considered “brokered” deposits on which undercapitalized banks face restrictions.
- ▶ To add insult to injury, the listed depositors were other small banks from around the country.
- ▶ Clearly, brokered deposits need to be redefined to include the deposits of listing services.

Bank Runs as Market Discipline

- ▶ During the month before its failure, the bank lost one-third of its deposits but replaced them with a “run in” of insured deposits, mostly listing service deposits.
- ▶ This moral hazard reduced market discipline and increased the FDIC’s resolution cost.
- ▶ If the original intent of deposit insurance was to protect small, unsophisticated savers, its role is now perverted.
- ▶ Perhaps insurance should be limited to depositors located within a bank branch’s local geographic area.
- ▶ Re-instating market discipline is critical: due to regulatory forbearance, depositor runs are often needed to close insolvent banks (c.f., Banco Popular). Insured deposits’ “funding stability” may not be a benefit.

Discussion of “Limits of Shadow Banks” by Buchak, Matvos, Piskorski, and Seru

- ▶ This important paper finds that well-capitalized banks tend to fund mortgages, particularly jumbos, on balance sheet.
- ▶ Nonbanks now tend to securitize conforming mortgages.
- ▶ This segmentation might be explained by:
 - ▶ nonbanks, lacking access to retail deposits, have more expensive on balance sheet funding. So they securitize conforming mortgages that have subsidized government guarantees and limited benefits from screening/monitoring. Guarantee fees for nonbanks were lowered to equal those of banks after the financial crisis.
 - ▶ (some) banks with a low tax-adjusted cost of equity and many retail deposits can more cheaply fund mortgages on balance sheet, and their first choice is jumbo mortgages that are expensive to securitize and benefit from better on-balance sheet incentives to efficiently screen/monitor borrowers.

Which Banks Retain, Rather than Securitize, Mortgages?

- ▶ The paper presents a detailed model of banks, nonbanks, and mortgage borrowers.
- ▶ But the model should also consider differences in on balance sheet costs of funding across banks:
 - ▶ marginal costs of equity capital differ due to corporate income tax rates that vary across U.S. states. This could partly explain different capitalization rates across banks.
 - ▶ marginal costs of deposit funding differ because local markets vary by their amounts of retail deposits relative to loan origination opportunities.
- ▶ As a result, banks operating mainly in high (*low*) tax states with poor (*rich*) retail deposits relative to lending opportunities are less (*more*) likely to fund on balance sheet.
- ▶ Note that funding via securitization is exempt from corporate taxes but requires competitive wholesale funding.

Determinants of Banks' Cost of On Balance Sheet Funding

- ▶ Using an MSA's proportion of young (*senior*) people to proxy for relatively loan (*deposit*) rich markets, Han, Park, and Pennacchi *JF* (2015) show that banks' rate of selling their mortgages is highest in loan rich MSAs in high tax states:

Univariate Tests for Mortgage Sales Ratios by State Corporate Income Tax Rate and Senior Population, 2001 to 2008

This table tests for differences in MSRs of banks whose state corporate income tax rate is higher than the sample median versus banks whose state corporate income tax rate is lower than the sample median. The table also compares the MSRs of banks whose MSA's proportion of seniors (proportion of the population aged 65 or above) is higher than the sample median versus lower than the sample median. The MSR is defined as the ratio of mortgages originated and sold during the calendar year to total mortgages originated during the calendar year.

	2001 to 2008 Average of Mortgage Sales Ratio		Difference (High-Low) (p-Value)	Rank-sum Z statistics (p-Value)
	Low Tax States	High Tax States		
All banks	14.24	18.81	4.57 (0.00)	12.55 (0.00)
Banks in MSAs with a high proportion of seniors	15.72	16.63	0.91 (0.23)	5.05 (0.00)
Banks in MSAs with a low proportion of seniors	13.18	21.85	8.67 (0.00)	11.99 (0.00)
p -value of $H_0 : (\overline{MSR}_{HighTax}^{LowSeniors} - \overline{MSR}_{LowTax}^{LowSeniors}) > (\overline{MSR}_{HighTax}^{HighSeniors} - \overline{MSR}_{LowTax}^{HighSeniors})$			< 0.001	

Discussion of “Illiquidity in Intermediary Portfolios: Evidence from Large Hedge Funds” by Barth and Monin

- ▶ Using hedge funds’ self-reported measures of their portfolio illiquidity and shareholder restrictions, the paper finds:
 - ▶ portfolio illiquidity and share restrictions are highly correlated.
 - ▶ portfolio illiquidity leads to higher returns that are captured mostly by investors.
 - ▶ managers of more illiquid portfolios charge higher fees.
- ▶ The paper’s findings are interesting, but more thought on the theory of shareholder restrictions would be useful.
- ▶ For example, are share restrictions valuable because they prevent portfolio liquidation costs due to
 - ▶ normal liquidity needs of investors?
 - ▶ “bank run” equilibria (Diamond and Dybvig *JPE*, 1983)?
- ▶ Might share restrictions be costly by reducing monitoring by better-informed investors (Calomiris and Kahn, *AER* 1991)?

Other Comments

- ▶ The measure of portfolio liquidity is a weighted average of assets' times until liquidation.
 - ▶ but (highly liquid) cash and cash-equivalents seem to be excluded.
 - ▶ a weighted average may miss other important characteristics of the liquidity distribution, such as liquidation times for the more liquid, most likely to be liquidated, assets.
- ▶ Setting low redemption prices and high redemption fees may substitute for share restrictions.
- ▶ The paper might better estimate monthly illiquidity from quarterly data (e.g., cubic spline or latent variable).
- ▶ The 2013-2017 sample period is short and lacks a crisis event that might generate lower returns to illiquidity.

Conclusions

- ▶ All three papers are interesting studies on important aspects of balance sheet risks.
- ▶ My appreciation of these papers' rigor and careful execution increased upon my closer reading of them.
- ▶ Clearly, they are valuable contributions to the finance literature.