Banks as Liquidity Provider of Second to Last Resort

Til Schuermann*
Federal Reserve Bank of New York

FRB Richmond Credit Markets Symposium
Charlotte, NC, April 17-18, 2008

* Any views expressed represent those of the author only and not necessarily those of the Federal Reserve Bank of New York or the Federal Reserve System.

Banks are back!

Providing liquidity on tap . . .

At least that's how it's supposed to work . . .

Some data

- Spread between Treasury and Agency repo historically has been around 9 bp
  - March 26 it was around 141 bp

- 1-month LIBOR to Treasury spread average typically around 37 bp
  - March 26 it was around 132 bp
  - March 31 around 148 bp!

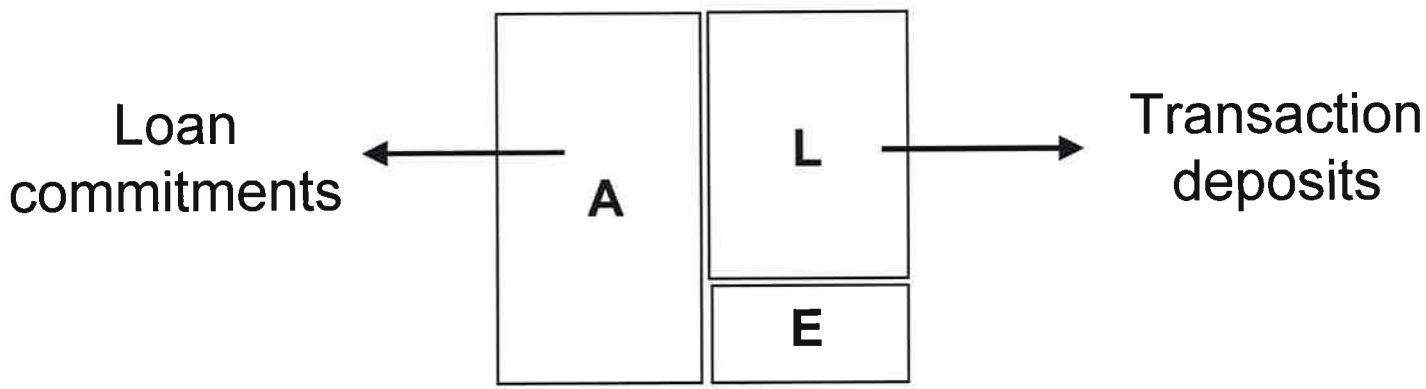
- Average 1-month LIBOR to OIS (overnight index swap) spreads are around 13 bp with a volatility of 3½ bp
  - March 31: 54 bp
  - volatility since Aug. 2007: 24 bp

The story

- Banks are natural providers of liquidity
  - Idiosyncratic needs
  - Systematic shocks
  - Fall of 1998
- When things go awry, banks re-intermediate liquidity and credit
- Is this still working?

Bank liquidity management

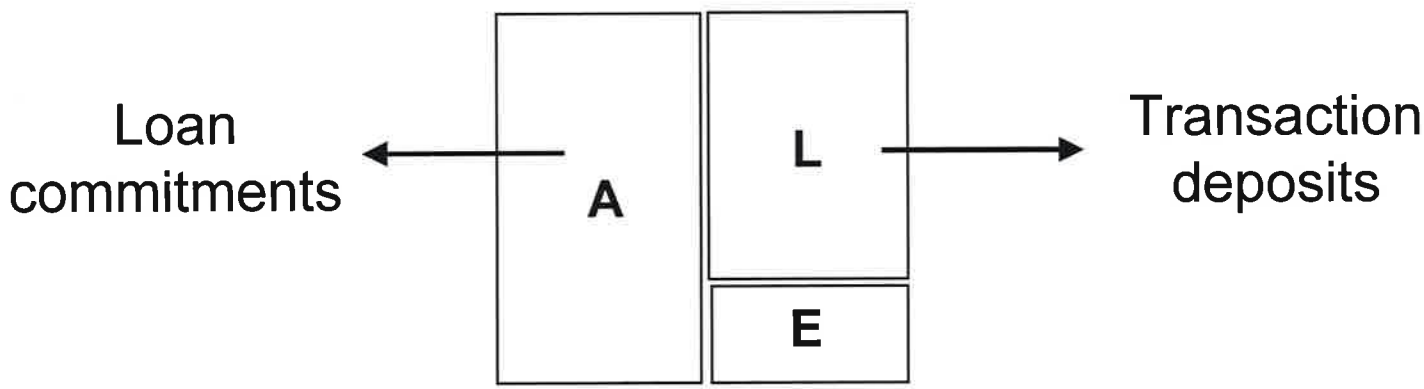
- A bank offers two short-term liquidity contracts



- Seems very unstable
  - What if demand spikes for both at the same time?
  - And what if that happens systematically (affecting *all* banks)
  - Worry about bank runs

Bank liquidity management

- A bank offers two short-term liquidity contracts



- Other sources of bank liquidity
  - Hold cash and liquid assets
  - Access to the inter-bank market
  - Borrow from the central bank

But maybe combining the 2 contracts reduces risk . . .

- Diversification synergy
  - Combining transactions deposits and loan commitments reduces *idiosyncratic* risk
  - Transaction deposits *hedge* the systematic liquidity risk exposure of loan commitments

- Flight to quality
  - Banks can bear *systematic* shocks to liquidity demand due to funding inflows
  - Deposit-lending synergy is *stronger* in a liquidity crisis (e.g. Fall 1998)

- Seems related to government safety net
  - Funding flows not related to bank solvency or size
  - Effects absent prior to FDIC

Idiosyncratic vs. systematic liquidity demands

- During 'normal' times, diversification synergy comes from reducing effect of idiosyncratic liquidity demands

- What if there is a systematic shock to liquidity?
  - All borrowers show up demanding liquidity
  - But: supply of TD increases too

- Hedging effect should be even stronger . . . And it is!

- During times of low liquidity, hedging term nearly triples in size
  - E.g. Fall of 1998
  - There is a run **to** banks

So what's happening to bank deposits?

Deposit Growth Rates			
Quarter-over-quarter, all commercial banks			
	Domestic	Foreign	Total
2001-2005	1.96	1.32	1.86
2006q1-2007q2	1.16	6.30	2.05
2007q3	0.85	6.97	2.09
2007q4	4.16	4.23	4.17
Entire period	*1.83*	*2.69*	*1.99*

It's good to be a (commercial) bank

- When short term funding, e.g. CP, in the capital markets dries up, go to your bank
- If you no longer wish to place your short term funds in ABCP, go to your bank
- How long can this go on?
  - Until balance sheet can grow no more
- Where does this leave investment banks?

Thank You!

http://nyfedeconomists.org/schuermann/