Issues in Bank Liquidity

Comments by Craig Furfine
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Bank Liquidity Creation

- Develops measures of bank liquidity creation
- Correlates measures of liquidity with characteristics of the bank
- Explores the relationship between bank capitalization and bank liquidity creation

Strengths

- Thorough use of data
  - Banks of all sizes
  - Significant sample period
  - Numerous tabulations
  - Regressions with extensive robustness checks

What I'd like to see more of

- Could benefit from more discussion of the possible explanations of the results.
- Illustration: Evidence on the correlation between bank capital levels and liquidity creation.
- Fact: Lagged capital ratio is positively (negatively) correlated with liquidity creation in large (small) banks. Is this causal?

Large bank

- Explanation 1: Greater levels of capital allow more risk-taking and thus, more liquidity creation.
- Explanation 2: Over the sample period, the bank shifts its typical activity “off-balance-sheet.” This raises its capital ratio and raises the liquidity per unit of assets.
  - Consistent with “fat” vs. “nonfat” results.
  - Consistent with 30% o-b-o robustness results.

Small bank

- Explanation 1: Greater capital levels crowd-out creation of liquidity.
- Explanation 2: Over time, small banks face increasing competition, which requires them to operate with lower capital ratios and more aggressive (illiquid) portfolios.

Other comments

- "Levels" of liquidity are hard to analyze/interpret. Approach in regressions seems sensible.
- Wholesale/retail distinction may be more sensible on a per dollar of assets basis.
- Regression results focus on capital, but could equally focus on other variables without relying on simple correlations (e.g. market valuation, mergers) – causality remains difficult.

Precautionary Reserves and the Interbank Market

- Describes variation in federal funds market participation across banks
- Develops model to help explain:
  - holding of excess reserves
  - heavy trading of federal funds
  - late in day funds-rate volatility

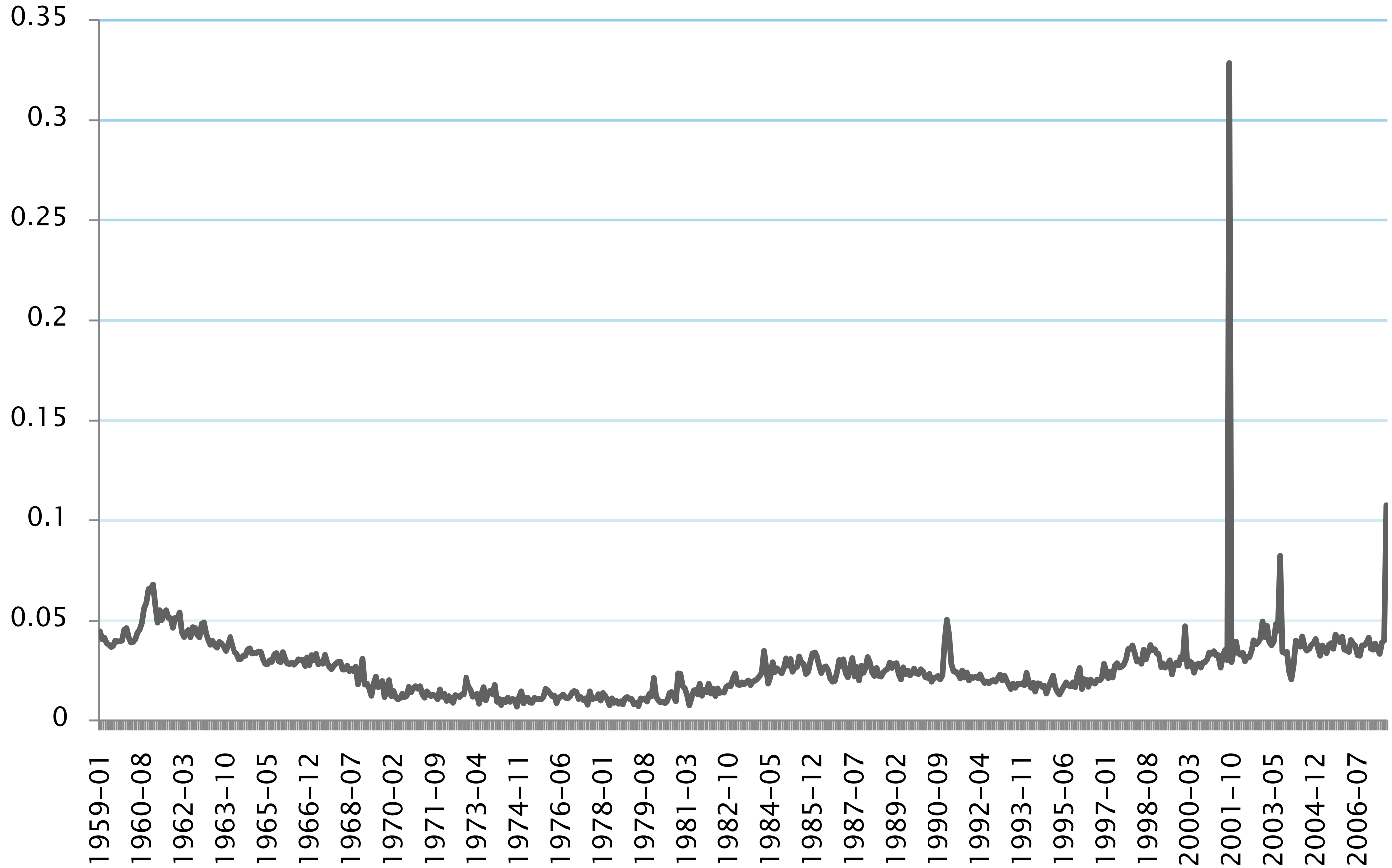
Strengths

- Use of Fedwire/DORPS data
  - Individual bank wire transfers
  - Individual bank intraday reserve balances
- Building of a richer model of interbank market and rate determination
  - Small banks and large banks
  - Multiple time periods within a day

What I'd like to see more of

- Improved connection between empirical facts and the propositions of the theory
- Exploration of other explanations of the given facts

Are excess reserve balances high?

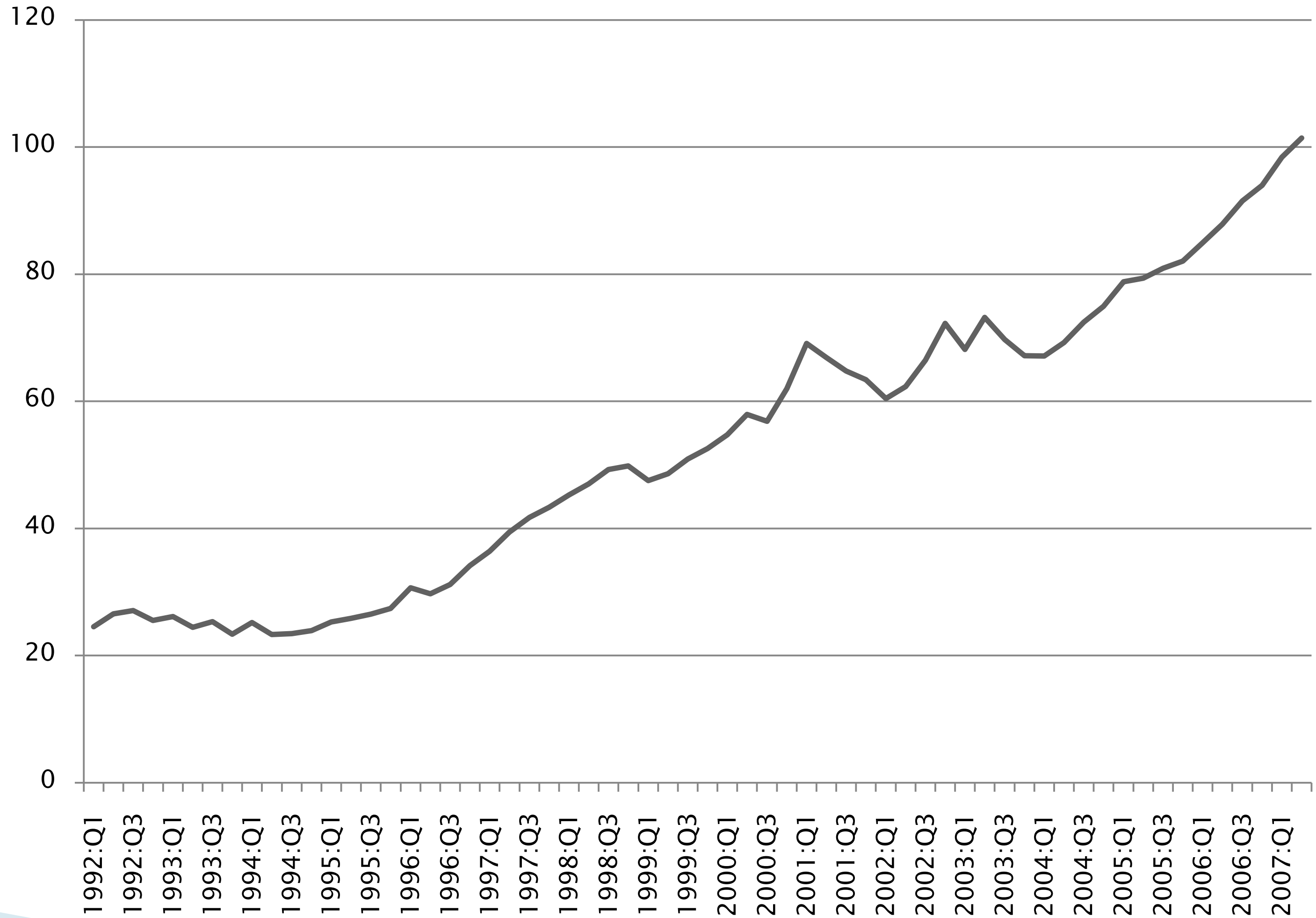


The funds market in perspective

Table 1: Identification of federal funds transactions.

	Volume	Value ($ billions)
Average daily total Fedwire transactions	376,951	1,210
Average daily candidate transactions	15,605	520
Average daily identified transactions	3,108	144

Required reserve turnover



Turnover by bank activity level

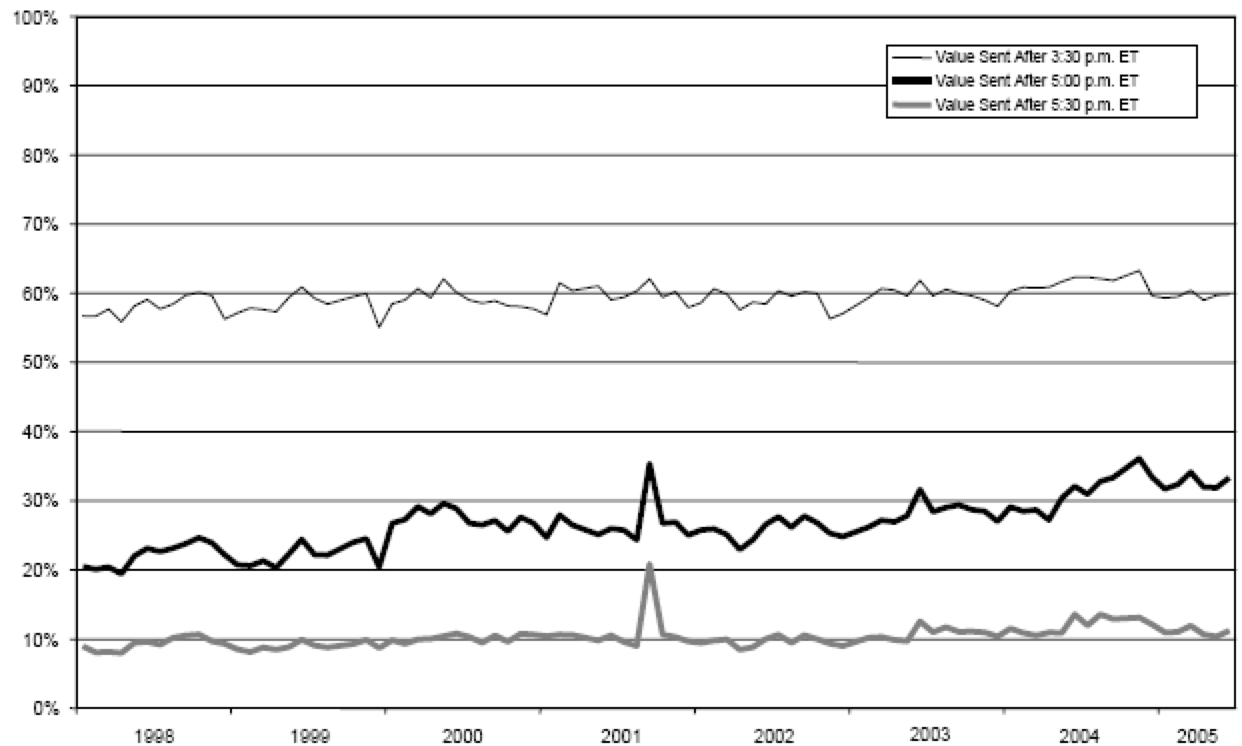
Table 1
Summary statistics

	Number of transactions on average			
	600–1500	1500–3000	1500–7500	Over 7500
Number of banks	58	28	18	12
Number of observations	49,561	24,923	16,058	11,339
Median daily payments volume (millions)	1490	3980	9820	61,900
Median required reserve balances (millions)	59.4	88.2	182	317
Median payments to closing balance ratio	28.98	53.83	57.80	180.58

Other comments on the facts

- Data cannot distinguish between time of trade and time of delivery.
  - Late-in-the-day compression of balances
    - Since most of the changes in reserve balances are not fed funds loans and most payment flows are predictable, it seems likely that fed funds deliveries/returns are happening late.
  - Late-in-the-day propensity to borrow/lend
    - Divergence from "normal" may indicate exogenous changes to inflows … both funds related and other

Late Fedwire activity



Other comments on the facts

- Model possibility: Large banks rely on borrowing to achieve non-negative reserves.
- Another possibility: The “over-the-counter” nature of the market lends itself to concentrated dealers.

Dealing in the funds market

	Borrowed	Loaned	Net Borrowed
1	21.98	9.971	12
2	12.39	4.858	7.53
3	4.55	17.42	-12.9
4	4.525	0.3982	4.13
5	4.367	9.295	-4.93

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