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Abstract

This article explores liquidity providers, on the cost of debt during the 2008—09 market crisis. Although municipalities face credit contraction, the study examines credit enhancement. This study empirically investigates whether liquidity providers affect the cost of municipal variable rate debt and whether the impact is affected by credit downgrades of liquidity providers. Several important contributions are made. First, this research emphasizes the role of liquidity provision as a form of credit enhancement. Second, the value of liquidity provision is examined in the environment of credit downgrades to liquidity providers. Third, the research tests capital market efficiency using variable, as opposed to fixed rate debt, which allows for the identification of liquidity risk and default risk.



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1.

1. Wang, Wu, and Zhang (2008) present a strong justification for examining liquidity in the municipal markets. “Because the municipal market is relatively illiquid compared to other markets, liquidity risk could potentially be a more important pricing factor for municipal bonds. When there is widespread deterioration in liquidity, it will be more difficult to liquidate municipal bonds than Treasuries securities. In anticipation of costly liquidation in a low liquidity environment, investors would require higher yields to compensate for bearing this risk. Furthermore, the trade size of municipals is typically

larger than that of equity transactions. Liquidity is expected to be more valuable for investors trading large orders even in routine transactions. In an unusual situation when the aggregate market liquidity suddenly dries up, it will be even more difficult to trade large quantities. Taken together, liquidity risk should be of more serious concern for municipal investors” (Wang, Wu and Zhang, 2008, 1136).

2.

2. Credit rating scores have been treated as both scale (Nanda and Singh 2004; Downing and Zhang 2004), dummy variables (Kidwell, Sorensen, and Wachowicz 1987; Bland 1987; Simonsen, Robbins, and Helgeson 2001; Cole and Officer 1981), and both (Feroz and Wilson 1992; Hsueh and Liu 1990) in the literature. In early models, both formulations were used and the results did not differ in magnitude, direction, or significance. Therefore, this study used scale variables to enhance the parsimony of the model.

3.

3. The contraction of the municipal variable rate debt market has less to do with the demand for such instruments as with two exogenous factors (Seymour 2009a; Collias, personal communication, February 5, 2010). First, “VRDOs normally need letter-of-credit backing from a bank to achieve ratings strong enough to be eligible for purchase by a money market fund. . . . Since the credit crisis decimated banks’ credit ratings, letters of credit with sufficiently strong ratings are more expensive and difficult to find. As a result, sales of VRDOs are down 76.5% this year” (Seymour 2009a). Second, the introduction in February 2009 of Build America Bonds as part of the American Recovery and Reinvestment Act has spurred the issuance of municipal taxable bonds, which represented 30.8 percent of the municipal market in August 2009. Anecdotal evidence suggests that banks are offering low-interest variable rate loans to municipalities instead of letters of credit to enhance variable rate bonded debt (Mattox, personal communication, February 5, 2010).

4.

4. It is noteworthy that most recent studies of this market have been either descriptive, or have relied upon secondary sources or anecdote, denoting a lack of available data on reoffering rates (Kriz and Levine 2009; Peng and Justice 2009; Levine and Greaves 2009; Johnson and Luby 2009).

5.

5. As the data expressed signs of heteroscedasticity and autocorrelation, the White-Huber Cluster Standard Errors approach was used. Standard errors were clustered by bonds and are presented in table 3. A Newey-West approach was also run, and the coefficients did not differ for our primary variables of interest. For additional conceptual background, please see Arceneaux and Nickerson (2009).

6.

6. The cost of liquidity provision varies according to a number of factors, including the underlying credit quality of the issuer, the geographic impact of demand for liquidity relative to supply, the degree that an issuer dominates the market, and the size of an issue. While each bank calculates its fees on a proprietary basis, generally fees between 75 basis points and 300 basis points are levied on the value of the debt outstanding. Post-2007, as credit has tightened, the fee spread has widened. Also, the tenure of liquidity facilities narrowed from 3 to 5 or 7 years, down to 1 to 3 years, during 2008—09.

References

Arceneaux, Kevin, and David W. Nickerson . 2009. Modeling certainty with clustered data: A comparison of methods. *Political Analysis* 17:177-90.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Beckett-Camarata, Jane. 2009. The current impact of the tightening credit market on municipal borrowing costs: A case study. *Municipal Finance Journal* 29:77-86.

[Google Scholar](#)

Bland, Robert L. 1987. The interest cost savings from municipal bond insurance: The implications for privatization. *Journal of Policy Analysis and Management* 6:207-19.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Bond Buyer. 2008. *The Bond Buyer 2008 yearbook*. New York : SourceMedia, Inc.

[Google Scholar](#)

Bond Buyer. 2009. *Thirty day visible supply*. http://www.bondbuyer.com/msa_display.html?validate-referer=%2Fhtml%2Fmsa_search.html&prod=Visible_history&product=4&VS_START_DATE=07%2F01%2F2008&VS_END_DATE=06%2F01%2F2009&submit=GO (accessed July 14, 2009).

[Google Scholar](#)

Braswell, Ronald C., E. Joe Nosari, and Mark A. Browning . 1982. The effect of private bond insurance on the cost to the issuer. *Financial Review* 17:240-51.

[Crossref](#)

[Google Scholar](#)

Cohen, Natalie R. 2009. When market risk becomes a credit factor: short-term markets and government's response. *Municipal Finance Journal* 29:13-22.

[Google Scholar](#)

Cole, Charles W., and Dennis T. Officer . 1981. The interest cost effect of private municipal bond insurance. *The Journal of Risk and Insurance* 48:435-49.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Cook, T. 1982. Determinants of individual tax exempt bond yield: A survey of the evidence. *Economic Review, Federal Reserve Bank of Richmond* 68:14-39.

[Google Scholar](#)

Denison, Dwight V. 2000. Did bond fund investors anticipate the financial crisis of Orange County? *Municipal Finance Journal* 21:24-39.

[Google Scholar](#)

Denison, Dwight V. 2003. An empirical examination of the determinants of insured municipal bond issues. *Public Budgeting and Finance* 23:96-114.

[Crossref](#)

[Google Scholar](#)

Denison, Dwight V. 2009. What happens when municipal bond insurance companies lose credit? *Municipal Finance Journal* 29:37-47.

[Google Scholar](#)

Downing, Chris, and Frank Zhang. 2004. Trading activity and price volatility in the municipal bond market. *The Journal of Finance* 59:899-931.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Fabozzi, Frank J., T. Dossa Fabozzi, and Sylvan G. Feldstein . 1995. *Municipal bond portfolio management*. Burr Ridge, IL: Irwin .

[Google Scholar](#)

Feroz, Ehsan H., and Earl R. Wilson . 1992. Market segmentation and the association between municipal financial disclosure and net interest costs . *The Accounting Review* 67:480-95.

[Web of Science](#)

[Google Scholar](#)

Forbes, R.W., and M.H. Hopewell. 1976. Private municipal bond insurance: A theoretical and empirical analysis. Paper presented at the Western Economic Association Meeting, San Francisco, CA.

[Google Scholar](#)

Gore, Angela K., Kevin Sachs, and Charles Trzcinka . 2004. Financial disclosure and bond insurance. *Journal of Law and Economics* 47:275-305.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Hsueh, L. Paul, and Y. Angela Liu . 1990. The effectiveness of debt insurance as a valid signal of bond quality. *The Journal of Risk and Insurance* 57:691-700.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Joehnk, Michael D., and David Minge. 1976. Guaranteed municipal bonds- their performance and evaluation. *Review of Business and Economic Research* 12:1-18.

[Google Scholar](#)

Johnson, Craig L., and Martin Luby. 2009. The birth, growth and collapse of the municipal auction rate securities market. Association for Budgeting and Financial Management, Annual Conference.

[Google Scholar](#)

Justice, Jonathon B., and Stewart Simon. 2002. Municipal bond insurance: trends and prospects. *Public Budgeting and Finance* 22:114-37.

[Crossref](#)

[Google Scholar](#)

Kidwell, David S., Eric H. Sorensen, and John M. Wachowicz, Jr. 1987. Estimating the signaling benefits of debt insurance: the case of municipal bonds. *The Journal of Financial and Quantitative Analysis* 22:299-313.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Kriz, Kenneth A. 2004. Risk aversion and the pricing of municipal bonds. *Public Budgeting and Finance* 24:74-87.

[Crossref](#)

[Google Scholar](#)

Kriz, Kenneth A., and Helisse Levine. 2009. The impact of variable-rate securities on bond issuance costs. Association for Budgeting and Financial Management, Annual Conference.

[Google Scholar](#)

Kwiatkoski, Paul. 2009. Municipal market struggles to maintain broad retail participation without bond insurance. *Municipal Finance Journal* 29:23-35.

[Google Scholar](#)

Levine, Helisse, and Paul Greaves. 2009. Disruptions in the short term market: The impact of liquidity/credit enhancement pricing on local government issuers of municipal bonds. Association for Budgeting and Financial Management, Annual Conference.

[Google Scholar](#)

Marlowe, Justin. 2007. Method of sale, price volatility, and the secondary market for new issue municipal bonds. Conference paper presented at the Association of Budgeting and Financial Management.

[Google Scholar](#)

Mecklenburg County, North Carolina. 2008. Comprehensive annual financial report for the year ended June 30, 2008. Report prepared by the Financial Department, Mecklenburg County, NC.

[Google Scholar](#)

Moody's. 2003. *Moody's rating symbols and definitions*. http://www.rbcpa.com/Moody's_ratings_and_definitions.pdf (accessed 3 February 2010).

[Google Scholar](#)

Moody's 2009. *Moody's reviews Assured Guaranty ratings for possible downgrade*. http://www.moodys.com/moodys/cust/research/MDCdocs/20/2007400000611809.asp?doc_id=2007400000611809&frameOfRef=corporate&namedEntity=Rating+Action (accessed June 26, 2009).

[Google Scholar](#)

Nanda, Vikram, and Rajdeep Singh. 2004. Bond insurance: what is special about munis? *The Journal of Finance* 59:2253-79.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Peng, Jun, and Jonathon Justice . 2009. The future of municipal bond insurance. Association for Budgeting and Financial Management, Annual Conference.

[Google Scholar](#)

Quinn, Jane Bryant. 2008, Now's the time to embrace municipal bonds. *Washington Post*, Nov. 30, F03.

[Google Scholar](#)

Regional Bond Dealers Association (RBDA). 2008. *Statement of the Regional Bond Dealers Association, Committee on Appropriations, United States House of Representatives, Hearing on the Economic Recovery Bill and State and Local Governments*. December 11.

[Google Scholar](#)

Seymour, Dan. 2009a. BABs help pump up volume; taxable debt sees a record share. *Bond Buyer News*, Sept. 1, 1.

[Google Scholar](#)

Seymour, Dan. 2009b. 1st half credit enhancers see a topsy-turvy world. *Bond Buyer*, July 16.

[Google Scholar](#)

SIFMA. 2009. http://www.sifma.org/capital_markets/swapindex.shtml (accessed 15 July, 2009).

[Google Scholar](#)

Simonsen, Bill, Mark D. Robbins, and Lee Helgerson . 2001. The influence of jurisdiction size and sale type on municipal bond interest rates: An empirical analysis . *Public Administration Review* 61:709-17.

[Crossref](#)

[Web of Science](#)

[Google Scholar](#)

Thakor, Anjan V. 1982. An exploration of competitive signaling equilibria with “third party” information production: The case of debt insurance. *The Journal of Finance* 37:717-39.

[Web of Science](#)

[Google Scholar](#)

Wang, Junbo, Chunchi Wu, and Frank X. Zhang . 2008. Liquidity, default, taxes, and yields on municipal bonds. *Journal of Banking & Finance* 32:1133-49.

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