

SEC Municipal Bond Panel

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The municipal bond market is fragmented, opaque and illiquid

Large market: about 4 Trillion in value

Many issuers and many issues: more issues than corporates or equity

Most bonds are small and trade infrequently:

- on average 3 trades per year for seasoned bonds
- 70% never trade after issue

Over 700 active dealers per month

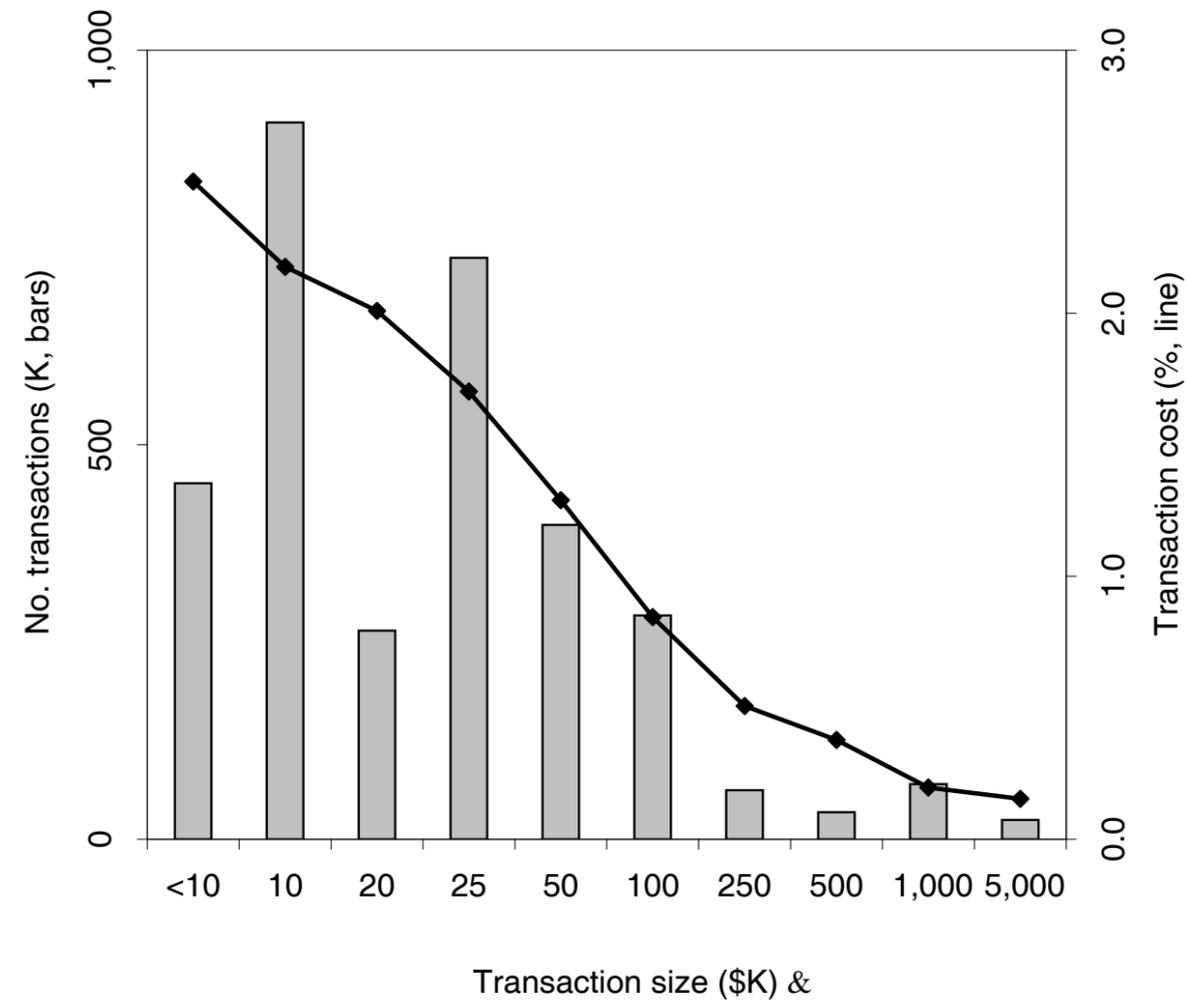
Historically: little pre-trade or post-trade transparency

January 2005

Now prices are reported 15 minutes after the transaction

EMMA

Transactions costs and trading by size: Secondary trading



from: Li and Schürhoff, 2013

The secondary market

Wide mark-ups

- 1-2% for retail size trades (compare to coupon rates)
- smaller for institutional sized trades

Price dispersion

Similar evidence in BABs

‘Rise like a rocket and fall like a feather’ (Green, Li and Schürhoff)

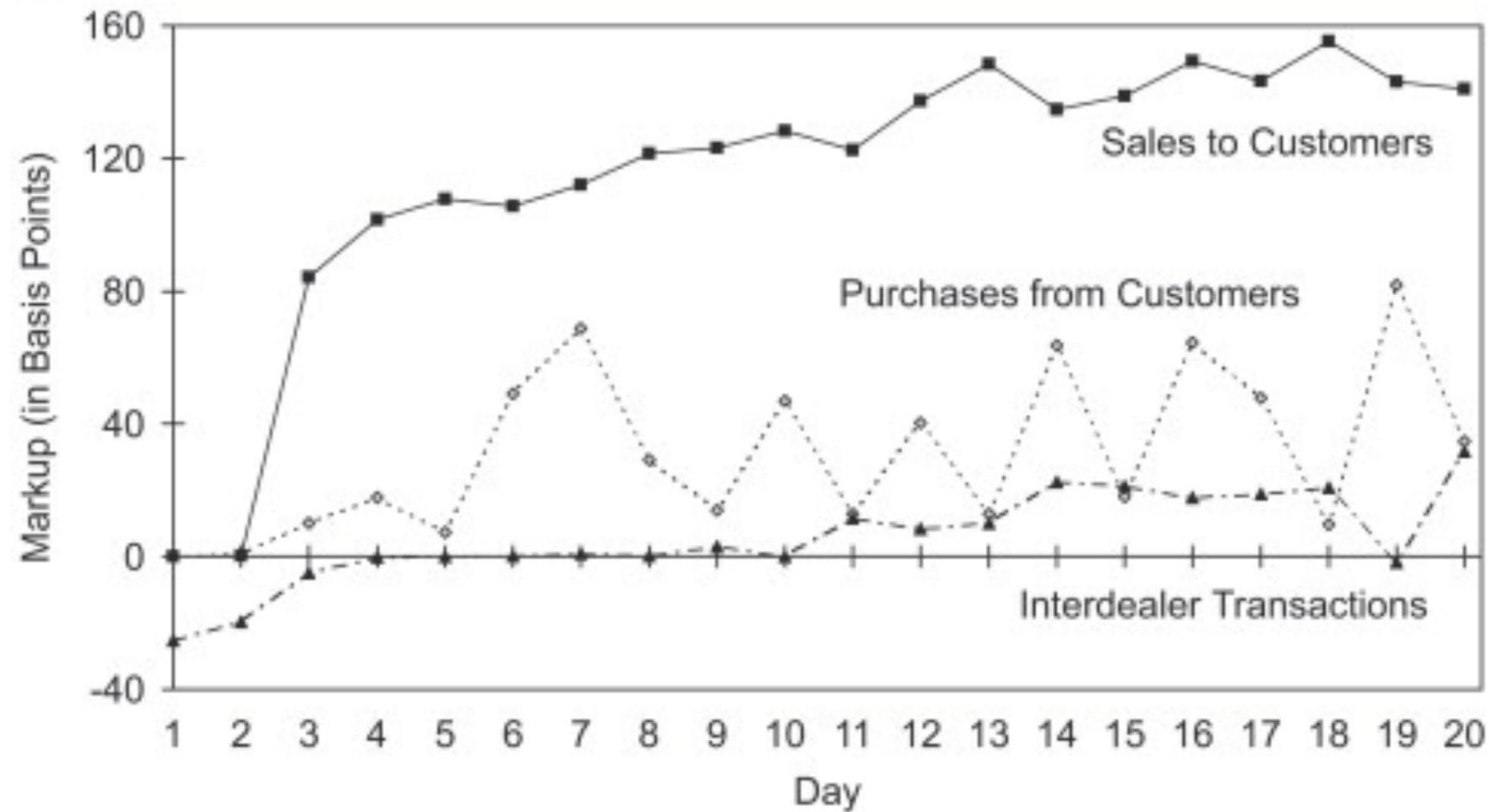
The Primary Market

Reoffering yield: not all bonds are offered at that price

Prior to 2005: price dispersion for small trades, higher average prices

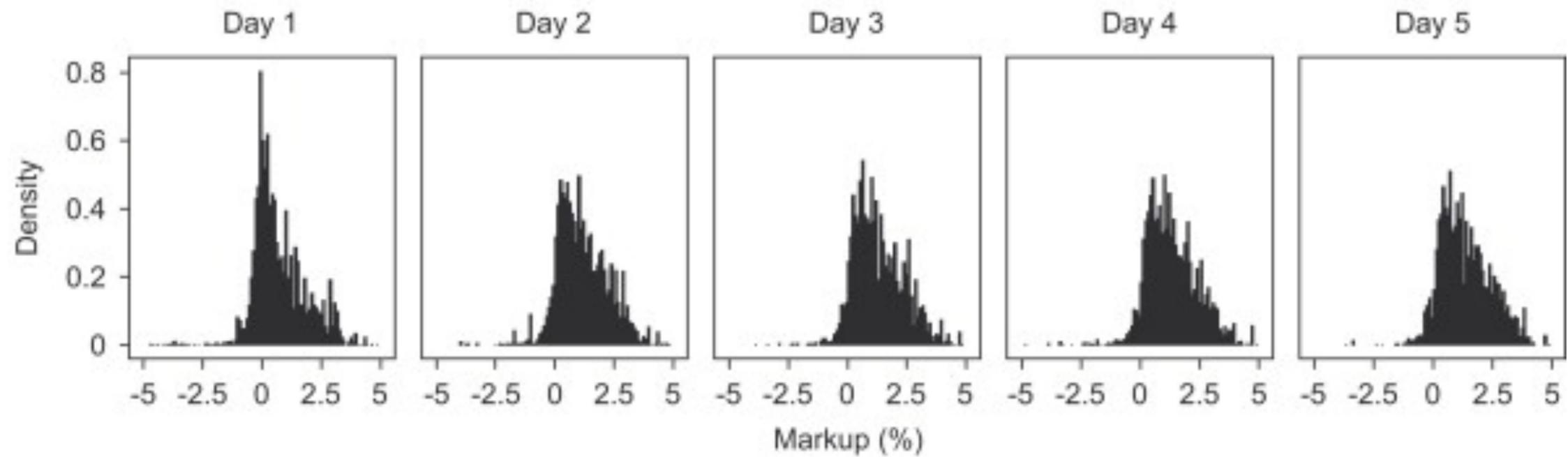
Opaqueness?

Median markups over time



from Green, Hollifield and Schürhoff

Price Dispersion



from Green, Hollifield and Schürhoff

Post 2005 Performance

Price dispersion drops dramatically

Average price does not drop

- small trades
- large trades

Take-away on post-trade transparency

BABs vs tax-exempts

Public Data

Pre MSRB data

Data availability

Information from changes in market structure

The phasing of changes?

Where do you draw the lines?

Bibliography

Green, Richard C. Green; Dario Cestau and Norman Schürhoff, Tax-Subsidized Underpricing: Issuers and Underwriters in the Market for Build America Bonds, working paper, Carnegie Mellon

Green, Richard C., Burton Hollifield, and Norman Schürhoff, 2007, "Financial Intermediation and the Costs of Trading in an Opaque Market," *Review of Financial Studies* 20(2), 275-314.

Green, R., Hollifield, B., Schürhoff, N., 2007. Dealer intermediation and price behavior in the aftermarket for new issues. *Journal of Financial Economics* 86, 643–682.

Green, R., Li, D., Schürhoff, N., 2010. Price discovery in illiquid markets: do financial asset prices rise faster than they fall? *Journal of Finance* 65, 1669–1702.

Harris, L., Piwowar, M., 2006. Secondary trading costs in the municipal bond market. *Journal of Finance* 61, 1361–1397.

Li, D., Schurhoff, N., 2013. Dealer networks. Unpublished working paper. Federal Reserve Board and University of Lausanne.

Schutz, Paul, 2012, "The market for new issues of municipal bonds: The roles of transparency 641 and limited access to retail investors," *Journal of Financial Economics* 106, December, 642 2012, 492-512