

Discussion: Price Clustering of T-Bond Trades and  
Quotes: Theory and Evidence  
Andrei Nikiforov and Eugene Pilotte

Discussant: Dale W.R. Rosenthal  
University of Illinois at Chicago

FMA Atlanta

18 October 2012

# Objectives

- Studies price clustering of T-bond trades and quotes.
- Consider sophisticated and liquidity trader types.
- Two-stage model: quote inquiries, then trade decision.
- Hypothesize types' demands for quote, trade clustering.
- Yield propositions which are tested against data. (Nice!)
  - More trade clustering (esp. w/maturity),
  - Less quote clustering for off-the-run bonds.
- Data: GovP<sub>x</sub> voice trade records (ex Cantor), 1998–1999.
- Confirm four main hypotheses for clustering.

# Minor Changes

- ¶1 of intro: do not repeat abstract; place work in context.
- Motivate why we care about 1998–1999 voice trades.
  - UST market is now  $\approx 99\%$  electronic.
  - Quote figures for market size then, not now.
  - No mention of LTCM implosion+bailout, effect on your data?
- Data for half the market; justify why they are representative.
- Less time on related work, e.g. 3–4 pages on hypotheses?
- Do not see how demand equations have discontinuity at  $L = 1/2$ .
- IDBs “leaning against the wind” = ???

# Methodology

- Clustering preferences of liquidity, sophisticated traders:
  - Imposed; why should we believe them? Should be estimated.
  - They are Beta( $\alpha, \beta$ ) dist'ns<sup>1</sup>; empirical Bayes?
- Better justify different preferences for IDB quote resolution.
  - Liquidity traders OK w/any grid if can quickly take price?
- There *is* a method for testing differences from distribution.
  - $\chi^2$  test; much better than K-S, other tests.
- Need to be more clear about testing each individual hypothesis.

---

<sup>1</sup>And they are *quasiconcave*.

# Collusion Hypothesis

- You neglect collusion hypothesis; big mistake (IMHO).
  - Voice-traded bond market was much more opaque than equities.
  - Yet Christie and Schultz (1994) found collusion in equities.
  - Fed/govt would detect collusion when equity traders did not?
- Voice trades = no centralized, easily-accessible audit trail.
  - So collusion seems more likely than in equities.
- Most trading in even 128th's (++'s); odd ++'s avoided. (!)

# Conclusion

- Propositions/empirical predictions are very nice; but,
  - Must strengthen the theory backing them, however.
- Could estimate, take Bayesian approach — much more defensible.
- Something is here, but collusion *must* be tested.