Physical Realities of Liquidity

Larry Harris
Fred V. Keenan Chair in Finance
USC Marshall School of Business

FRB-Atlanta Financial Markets Conference

May 2, 2016

A Quick Digression!

- Learn the Kyle-Obizhaeva Microstructure Invariance Model.
- It is the most important empirical paper in market microstructure.

General Comments

Physical Reality

- Someone has to own everything.
- Liquidity is about the transfer of risk from one holder to another.

Risk and Instruments

- Instruments rarely exclusively embody a single unique risk.
- They generally represent common factor risks so that many instruments are highly correlated.
- Examples
  - On- and off-the-run bonds.
  - Investment grade corporate bonds.

Concerns about Liquidity

- Extreme, unexpected demands to transfer risks can destroy value.
- Value is lost when
  - Organizational structures collapse due to bankruptcies.
  - Investors lose confidence.

Speed

- Well organized (generally slow) transfers of risk are better than chaotic (often fast) ones.
- Too much, too fast, can overwhelm the capacity to value assets.
  - People can panic.
  - Natural buyers (or sellers) often cannot react quickly enough to prevent excess volatility.
- Asset valuation, risk evaluation, and decision-making take time.

Solutions

- Reduce all frictions.
  - Improve markets and reduce search costs.
- Reduce uncertainties caused by complexities and lack of relevant information.
  - Central clearing is very beneficial.
  - Overly complex instruments are not helpful.
- Pre-plan liquidity transfers using explicit options contracts.
- Ensure that liquidity is priced everywhere.

Who will Supply Liquidity?

Bond Liquidity in the Future

- Reducing frictions that prevent the buy-side from easily meeting the buy-side will allow the buy-side to offer liquidity to the buy-side.
  - Order display facilities (electronic exchanges) need to be more readily available to all traders.
- Prop firms will replace traditional dealers.
  - They already are.

The Future is Arriving

- Electronic trading in corporate bonds is growing substantially.
  - It benefits dealers and some large institutions but not most investors.
- Half of the bonds on TRACE have two-sided quotes almost all the time.
- 230 bonds trade more than 20 times per day.

Dealing at Banks versus Prop Firms

Dealing is moving from banks to prop firms due to

- Volcker Rule
- Coarse capital requirements at banks versus portfolio margining for prop firms.
- Low capital commitment by banks due to low profitability due to low volatility.

Suggestions for Future Improvements

- NBBO and order handling rules for corporate bonds.
- Central clearing for repos (and other instruments).
  - Helps solve rehypothecation problems.
  - Reduces the overall level of uncertainty to the question of whether the clearinghouse is solvent.
  - Clearing members have strong incentives to regulate each other.

More Suggestions

- Require more capital for entities that make promises based on their balance sheets.
  - More capital transfers liquidity (and value) risk pricing to the private sector.
  - More capital lowers their costs of capital.
- Get time-varying market prices for mutual fund liquidity.