Physical Realities of Liquidity

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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.