

Discussion of

What drives liquidity in the Chinese credit bond markets?

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@CICF 2021

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Overview

- The paper empirically investigates the pricing of liquidity risk in Chinese corporate bonds.
- The paper finds:
 1. Liquidity risk is priced
 2. The price of liquidity risk is heterogeneous
- My two cents:
 - The empirical results are careful and intriguing
 - I am not sure how to interpret the second set of results (**main comment**)

How this paper fits into the literature

- Old-fashioned asset pricing does not consider liquidity
- Since Amihud (2002), Pastor-Stambaugh (2003), Acharya-Pedersen (2005), people started to think that liquidity is priced
 - Recent CFR replications broadly supportive (with caveats)
- Liquidity pricing in corporate bond market:
 - Bao, Pan, and Wang (2011), Friewald, Jankowitsch, and Subrahmanyam (2012), Dick-Nielsen, Feldhütter, and Lando (2012)
 - FJS finds that liquidity matters more in bad times, and for low quality bonds
- This paper:
 - Liquidity pricing in the Chinese bond market

1. Conceptual: what governs liquidity risk pricing?

“Theory”

- Returns with transaction costs:

$$Ret_{t+1} = \frac{Coupon_{t+1} + P_{t+1} - I_{sell,t+1} \times TransactionCost_{t+1}}{P_t}$$

- Thus, transaction costs should be taken into account in pricing:

$$Yield_{i,t} = Yield_{i,t}^{frictionless\ market} + \psi_t \cdot Liquidity_{i,t}$$

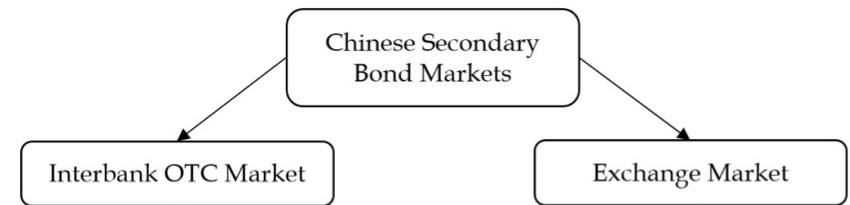
- First prediction: $\psi_t > 0$ (fairly straightforward)
- **Addition predictions: what determines variation in ψ_t ?**
 - E.g. Trading frequency of market participants would matter (Li and Yu (2020))
 - Covariance of $TransactionCost_t$ with $I_{sell,t}$ would matter... etc

2. Let's interpret the results

Yes, liquidity is priced

- To measure liquidity, the paper uses PCs extracted from 5 measures
 - Measures = Amihud, Interquartile price range, Price dispersion, Corwin-Schultz High-low spread, and Corrected high-low
 - Good idea, as liquidity measures are noisy
- Finding: 1 SD higher liquidity (PC1) → 10.7bp lower yield spread
 - Believable results
 - Results quantitatively similar to Friewald, Jankowitsch, and Subrahmanyam (2012) on U.S. corporate bonds

Liquidity is priced less in the interbank market



• Table 4:

	Dependent variables: Yield spreads					
	Interbank sub-sample			Exchange sub-sample		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full	Enterprise	MTN	Full	Enterprise	Corporate
<i>Intercept</i>	6.907 *** (12.189)	5.515 *** (3.680)	6.808 *** (13.633)	8.055 *** (5.988)	7.913 *** (4.673)	6.971 *** (4.327)
<i>Liq.PC1</i>	-0.011 *** (-2.801)	-0.018 ** (-2.095)	-0.020 *** (-4.699)	-0.093 *** (-8.936)	-0.062 *** (-5.079)	-0.104 *** (-8.179)
<i>Liq.PC2</i>	-0.014 (-1.004)	0.037 (1.325)	-0.049 *** (-3.195)	-0.171 *** (-6.436)	-0.225 *** (-4.857)	-0.153 *** (-5.603)

- Paper: retail traders are on exchange. They trade much more frequently but in small amounts.
 - This can be theoretically justified, but need a lot more details.
 - What fraction of the market is retail? Is their presence sufficient to justify the difference? How frequently do they turnover their portfolio?

The other findings of heterogeneity

- The paper looks at more cuts of the data
- There are several shocks to **bond liquidity**...
 1. Repo eligibility change in 2014
 2. Rescinding the implicit credit guarantee of “Chengtou” bonds
 3. Crackdown on agent holding activities
 4. Liberalization on foreign investment
- However, it is unclear what is their shock to the **pricing of liquidity**:

$$Yield_{i,t} = Yield_{i,t}^{frictionless\ market} + \psi_t \cdot Liquidity_{i,t}$$

3. Assessment and recommendations

The good

- Good data about a new market
- Very careful (almost painstaking) empirical work
 - The draft is 89 pages (including appendix)
- China's bond market provides many interesting ways to cut the data
 - Trading venue: interbank vs. exchange
 - Bond type: corporate, enterprise, MTN, ...
 - Market participants: local institutional, local retail, and foreign

Where the paper can improve

- However, the paper would do much better to provide a coherent conceptual explanation of the heterogeneity in price of liquidity
- The current paper intro motivates as a “China paper”
 - ... China’s bond market is huge, yet largely not studied...
- **I think it is possible that the paper can make use of the institutional settings in China to deliver more general insights**
 - Otherwise, it may be less interesting
- I enjoyed reading the paper