#### Discussion of Wu (2021)

"Increasing Corporate Bond Liquidity Premium and Post-Crisis Regulations"

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#### The Cross-Sectional Regression Coefficient $\lambda_t$

Credit Spread<sub>it</sub> =  $a_t + \lambda_t$  Bid-Ask Spread<sub>it</sub> + Controls<sub>it</sub> +  $\epsilon_{i,t}$ 



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## Key Insights and Main Results

- Dealers can function as
  - Brokers: matching trades.
  - Market makers: holding inventory and providing liquidity.
- Basel II.5 (announced on June 7, 2012):
  - Increase dealers' balance sheet costs for trading corporate bonds.
  - Disincentivize their willingness to hold inventory.
- Empirical results:
  - > The liquidity premium increased since the financial crisis.
  - Longer trading delays due to dealers' unwillingness to provide immediacy.
  - Diff-in-diff: Basel II.5 interacted with affected bonds (yield change volatility).
  - ▶ Diff-in-diff: Volcker Rule interacted with affected dealers (lead underwriters).

## The Post-2012 Increase of $\lambda_t$ is Mostly a High-Yield Phenomenon



## Trading Delays: Not Directly Estimated



Figure 7: Trading Delays

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#### Fraction of Brokered Trades

Rating	A and above	BBB	Speculative
Pre-Crisis: Jan 2004 - Jun 2007			
$\lambda_{ m Pre-Crisis}$	0.110*** (6.90)	$\begin{array}{c} 0.211^{***} \\ (15.49) \end{array}$	0.645*** (10.67)
Crisis: Jul 2007 - Apr 2009			
$\lambda_{\text{Crisis}}$	0.505*** (4.96)	0.370*** (4.32)	1.155*** (8.85)
Post-Crisis: May 2009 - May 2012			
$\lambda_{\mathrm{Post-Crisis}}$	0.402*** (12.27)	$0.405^{***}$ (14.47)	0.981*** (8.22)
Basel II.5: Jun 2012 - Jun 2013			
$\lambda_{\rm Basel~II.5}$	0.365*** (8.61)	0.553*** (17.77)	2.021*** (22.47)
Basel III: Jul 2013 - Mar 2014			
$\lambda_{\mathrm{Basel III}}$	0.206*** (3.97)	0.453*** (33.14)	1.989*** (23.70)
Post-Volcker: Apr 2014 - Sep 2019			
$\lambda_{\mathrm{Post-Volcker}}$	0.191*** (8.44)	0.472*** (11.35)	2.665*** (15.85)

#### Table A9: Fraction of Brokered Trades

Rating	A and above	BBB	Speculative	
Pre-Crisis: Jan 2004 - Jun 2007	7			
Brokered Trade (%)	11.522	9.984	13.713	
Crisis: Jul 2007 - Apr 2009				
Brokered Trade (%)	17.755	19.604	19.470	
Post-Crisis: May 2009 - May 2012				
Brokered Trade (%)	16.284	18.671	19.531	
Basel II.5: Jun 2012 - Jun 2013	5			
Brokered Trade (%)	13.373	15.705	17.423	
Basel III: Jul 2013 - Mar 2014				
Brokered Trade (%)	13.667	14.467	15.773	
Post-Volcker: Apr 2014 - Sep 2019				
Brokered Trade (%)	20.790	22.573	23.511	

Notes: This table provides a summary the fraction of the total customer-dealer dollar trading volume that is immediately matched within one minute and with the same quantity.

# My Thoughts on $\lambda_t$

- Not a standard test of liquidity risk premium. Used to measure liquidity:
  - Dealers' reducing provision of liquidity: This Paper.
  - ▶ Investors' increasing demand for liquidity: Li and Yu (2021).
- A positive and significant  $\lambda$  is a well established empirical fact (e.g., Bao, Pan, and Wang (2011)) an indication that liquidity matters for credit pricing.
- $\bullet$  But the time-series variation of  $\lambda_t$  can be driven by many factors. For example,
  - Increased cross-sectional variation in credit spreads driven by
    - \* A market-wide credit concern.
    - $\star$  A group of distressed bonds with explosive credit spreads.
  - while bid/ask spreads do not increase by the same proportion.
- Without timely controls of credit risk, the cross-sectional regression would yield a higher  $\lambda_t$ , driven by increases in credit risk (either market-wide or by a few bonds).
- A growing bond sample might also expand the cross-sectional variation in credit spreads without the same effect on bid/ask spreads.

# My Comments and Suggestions

- An interesting topic:
  - Decreasing transaction costs (e.g., bid/ask spreads).
  - ▶ Increasing concerns over liquidity the "retreat" of dealers (Duffie 2012).
- I agree with the hypothesis:
  - Increased trading delays due to dealers' unwillingness to provide immediacy.
  - Similar to the findings of Choi, Huh, and Shin (2022): increased cost of immediacy due to dealers' retreat and the rise of customer liquidity provision.
  - Also consistent with the findings of Bao, O'Hara, and Zhou (2018): increased illiquidity of stressed bonds post Volcker Rule.
- Central to the empirical analysis is the cross-sectional sensitivity of credit spreads to bid/ask spreads as a measure of liquidity premium: not yet convinced.
- Suggestions: look for direct evidences of trading delays, cost of immediacy, and dealers' retreat.