

# Discussion of P. Collin-Dufresne, B. Junge and A. Trolle “Market Structure and Transaction Costs of Index CDSs”

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# The paper in perspective

**Key issue:** lack of papers on the understanding of transaction costs in the CDS market (\$15 trillion, BIS Statistics 06/2015). OTC market, under-regulated until the 2007-2009 financial crisis. Most studies done in collaboration with regulators.

- ▶ **Challenge of the paper:** using anonymized Credit Index trade reports from 3 SDRs to determine transaction costs in the D2C market vs. the D2D market
- ▶ Credit index contracts: standardized → "futurization"

"Normal" trades

	D2D		D2C		
	On-SEF		On-SEF	Off-SEF	
	voice or electronic order book		85%-89% RFQ for <b>at least 3 brokers</b> (RFQ3+)	11%-15% RFQ <b>at most 3 brokers</b> (RFQ3-)	
Mechanism	* Mid-market matching, Workup		Limit order book	Sealed bid auction	Sealed bid auction
	* Limit order book				
Pre-trade transparency	Anonymity		Anonymity	Name-disclosed	Name-disclosed

Block trades

Off-SEF

RFQ1

# The paper: some highlights

- ▶ CDX.IG and CDX.HY (North America corporate credit risk)
- ▶ **Time period:** Oct.2, 2013 to Oct.16, 2015 (post Dodd-Frank)
- ▶ **Data:** 4 sources
  - “on-SEF” trades (anonymized, time-stamped price and size up to a cap): outright trades, index roll trades and package trades
  - Markit intraday mid-quote
  - GFI data
  - (Clarus FT data)
- ▶ **Main results**
  - Effective spreads and price impacts: **higher for D2C** than D2D trades, **higher for CDX.HY** than CDX.IG.
    - ▶ Robustness checks (trade-by-trade regression, size-matching analysis)
  - DTC trades Granger cause DTD trades
  - Other results:
    - ▶ Market protocol of D2D seems related to smaller price impact estimates
    - ▶ Trade size of CDX.IG 5 times higher than CDX.HY,
    - ▶ CDX.HY trades more (1.5 times)

# Comments

Do price impact measure accurately liquidity in this market? Is the **adverse selection friction** the most important?

- ▶ Very **small magnitude of price impact estimates**:  $< 0.14$  bp for CDX.IG and  $< 0.68$  bp for CDX.HY
- ▶ 100 times less than U.S. corporate single-name (14 bp according to Biswas et al., 2015)
- ▶ Small impact **expected?**
  - Instrument on a diversified basket of single-name (125 or 100 constituents): low impact of adverse selection (Subrahmanyam, 1991)
- ▶ Magnitude of price impact similar to that of ETFs (Marshall et al, 2016). However the size of trades are much larger (\$50M for CDX.IG and \$10M for CDX.HY).
  - Is the credit index market more like a **block market**?
  - Why not try to identify price pressure (Hendershott and Menkveld, 2011)? Or a **decomposition in temporary vs. permanent price impact** as in Keim and Madhavan (1996)?

# Comments

- ▶ Identification algorithms?
  - Missclassification across SEF? What is the rate of correct classification?
  - Missclassification between buy and sell trades? Recurrent problem in the CDS market
    - ▶ Using similar credit index data, similar signing rule (based on Lee and Ready algorithm) and a proprietary dataset, Eisler and Bouchaud (2016) report **28% of incorrect classifications** generating a price impact estimate which is biased.
- ▶ Lower price impact in the D2D market: is it a question of market protocol (sealed bid auction vs. workup or mid-price matching)? or **anonymity**? (or both)
  - Reiss and Werner (2004): adverse selection is less prevalent in anonymous brokered market in the former OTC London Stock Exchange.

## Other comments

- ▶ Inventory management in the D2D market?
  - Contraction in D2D activity (BIS reports). Illustrated in this paper: D2D market is 5 times smaller and 5 times less active than the D2C market.
  - Far from the “hot potato” scenario described in some other OTC markets  
⇒ **How and when do dealers manage inventory** (probability to observe a D2D)?
- ▶ Why not express transaction costs as basis point of the credit spread itself?
  - Recurrent question in the CDS market: does one use **absolute or relative transaction costs** as a measure of illiquidity (see Markit illiquidity measure combining both)?
  - Using relative price impact, Bouchaud et al. (2016) find that CDX.HY have less price impact than CDX.IG.
- ▶ Some summary statistics are missing
  - Markit bid-ask spread, the mid-quote CDX premium, the implied vol of swaption (liquidity of these markets? how does this volatility compared to the price impact estimates?)

# Conclusion

- ▶ A very interesting and relevant paper!