

# Discussion: Bond Market Liquidity and the Role of Repo

Huh and Infante (2016)

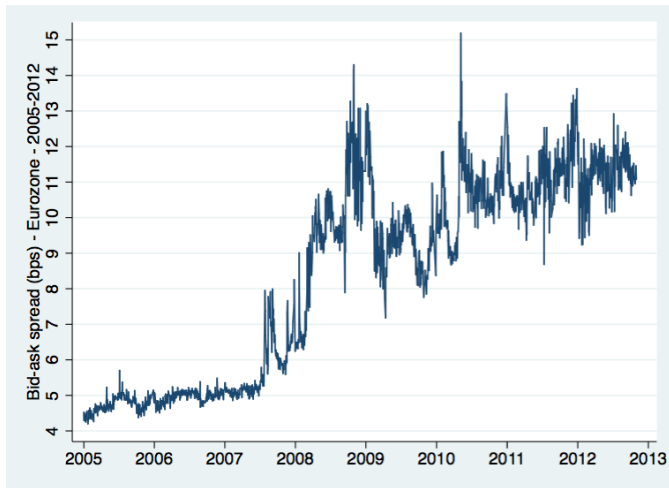
Jean-David Sigaux

HEC, Paris

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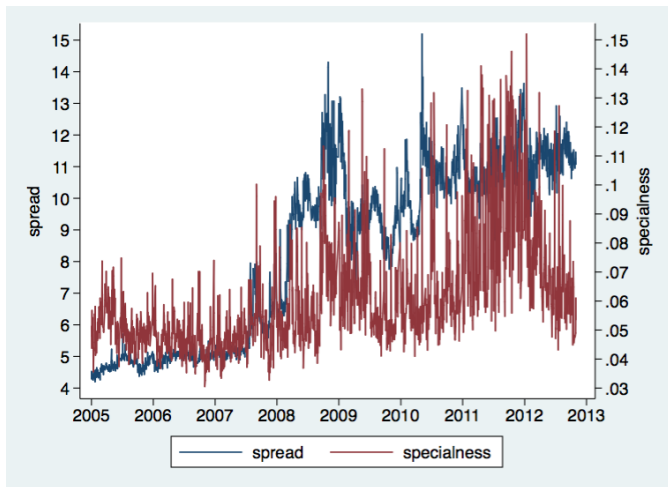
- Start point: Asymmetry in Repo markets
  - Rate for lending cash  $<$  Rate for borrowing cash
- Question: Does this asymmetry affect Treasury spreads?
- Finding #1: Higher specialness = Higher spread
  - When borrowing securities on Repo, Dealers pass on to the customer the loss in interest income
- Finding #2: Even more in case of balance sheet restrictions

# Big question addressed "Why do Treasury spreads move?"



*Bid-ask spread = (Ask - Bid) / Mid. 2005-2012. Eurozone sovereign bonds. Equal-weighted. Filtered at 95th. MTS platforms.*

# Authors chose to study Specialness as a potential driver of spreads



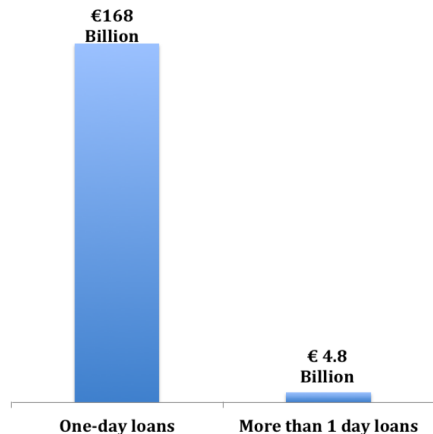
*Spread (bps, 0-95th) and Specialness (Spot Next, annual pct, 25-75th). 2005-2012. Eurozone sovereign bonds. Equal-weighted. MTS, MTS Repo*

# Traditional approach to spread vs. paper's approach

- The traditional approach to spreads
  - Step 1: Locate a source of risk for the dealer (e.g. volatility of fundamental value; asymmetric information)
  - Step 2: Study the extent to which dealers charge for this risk using spreads
- This paper's approach to spreads
  - Step 1: Locate a source of cost
  - Step 2: Study the extent to which dealers use spreads to pass on this cost to the client
- I suggest studying specialness not only as a source of cost but also as a source of risk

# Suggestion: Introduce roll-over risk (1/4)

Dealers use one-day Repo loans



*Daily special repo volume.  
2005-2012. Eurozone sovereign  
bonds. MTS Repo, ICAP.*

**Conclusion:** Dealers use 1-day loans to borrow securities on Repo market

## 2 potential interpretations

- 1 Either dealers only need to borrow securities for 1 day
- 2 Or they roll-over 1-day loans

# Suggestion: Introduce roll-over risk (2/4)

Dealers roll-over their one-day loans

Security loan duration (in days)				
Percentiles		Smallest		
1%	1	0		
5%	8	0		
10%	17	0	Obs	686964
25%	40	0	Sum of Wgt.	686964
50%	84		Mean	124.7602
		Largest	Std. Dev.	151.8819
75%	153	1708		
90%	254	1708	Variance	23068.13
95%	364	1708	Skewness	3.883338
99%	858	1708	Kurtosis	24.3257

*Security loan duration. OTC market. 2006-2012. Eurozone sovereign bonds. Equal-weighted. Markit*

## Conclusions:

- 1 If dealers are similar to OTC borrowers, they borrow for more than 1 day
- 2 Dealers are likely to face **roll-over risk**

# Suggestion: Introduce roll-over risk (3/4)

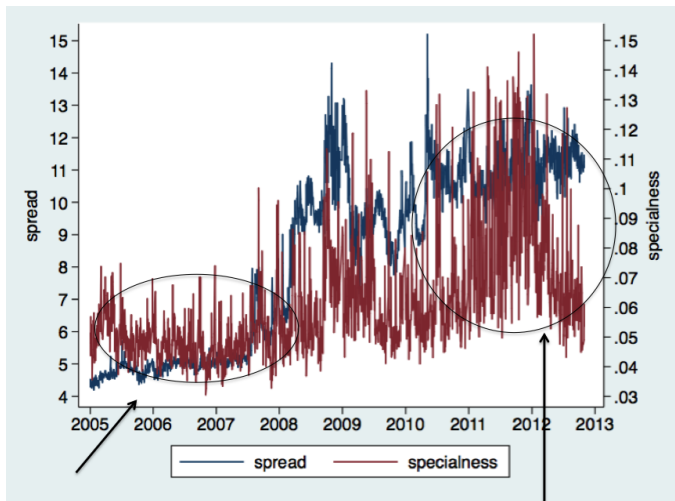
New prediction: Higher roll-over risk  $\Rightarrow$  Higher spreads

- Previous literature: Dealers ask for larger spreads when fundamental volatility is larger
- Both fundamental volatility and Specialness volatility impact dealers' consumption
- **Intuitive prediction:** Higher roll-over risk  $\Rightarrow$  Higher spreads



# Suggestion: Introduce roll-over risk (4/4)

New prediction may help explaining time-varying spreads



Low roll-over risk  
=> Prediction : Low spreads

High roll-over risk  
=> Prediction high spreads

- Paper tackles the determinants of Treasury spreads with a model of market-making featuring access to Repo market
- Current model
  - Features a perfectly predictable Specialness
  - Main prediction: Higher Specialness = Higher spread
- My suggestion
  - Consider that dealers face roll-over risk on the special Repo market
  - Change the model to make Specialness imperfectly predictable
  - Most likely, obtain a new prediction: Higher roll-over risk  $\Rightarrow$  Higher spread