Outages in Sovereign Bond Markets

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Main Result and Contribution

**Main result:** outages in the futures market for European sovereign bonds causes spot markets to seize up

**Contribution:** empirical evidence suggesting that sovereign bond futures market prices are crucial input used by spot market traders
A Lot to Like About This Paper

Clear and simple identification: outages as natural experiments

Cool data: multiple high-frequency datasets

Well-written: clean and thorough exposition

Interesting findings: clear causal connection between futures and spot market activity BUT not the other way around
Why Do These Results Matter?

• The authors write the following about their results:
  
  • “This paper tackles [the] question […] where and how price formation takes place”
  • “informative about how the sovereign bond market works in normal times”
  • “suggest that bond futures are vital for the euro area fixed-income market to function smoothly”
  • “can inform the recent literature on cyber risks”
  • “the European futures exchange Eurex is of systemic importance for the fixed-income market”

• An assumption behind some of these statements is that the impact of the outage had negative impacts in welfare sense. Is that true?
Who Was Harmed By the Outage?

• It is clear that volume and liquidity evaporated following outages

• If no one is trading, who is harmed?
  • People who wanted to trade but couldn’t
  • People who traded anyway but got a bad price

• How big are either of the above groups?
  • This matters for welfare consequence of mispricing
Why Did Trading Stop in Spot Markets?

• Authors’ hypothesis: futures market prices are vital inputs to spot market bond traders for price discovery

• Alternative story: spot market traders simply chose to take a few hours off while the futures market was offline

• Key questions:
  • Were spot market traders unable to trade or did they choose not to?
  • How much do they overlap with futures traders?

• Suggestion: ask spot market traders
What To Do Moving Forward

• Outages appear to be sporadic and short
  • Two outages in 2020 of 4 hours and 2 hours
  • “twelve previous outages on Eurex between 2009 and 2018”

• Should we be worried?
  • No: US markets not affected → not systemic despite correlated assets
  • Yes: what if outages lasted longer than a few hours
Final Thoughts: Big Picture

• The results in the paper reveal the hidden plumbing behind the European sovereign bond market
  • They tell us *where* price formation takes place

• Unclear at this point if results also:
  • Tell us *how* price formation takes place
  • Imply systemic risk concerns
Thank You!