Discussion of Bond Convenience Curves and Funding Costs
by Juuso Nissinen and Markus Sihvonen

Florian Wicknig¹

¹Deutsche Bundesbank

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This Paper

Motivation

- Collateral is an essential part of financial markets.
- For equally risky assets, those that have higher collateral benefits trade at a smaller yield: convenience yield.
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- Investigate the term structure of (in)convenience yields.
- Provide a microfoundation for such convenience yields.
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Approach

- Theoretical model with risk-averse arbitrageurs that face funding risk.
- Empirical analysis of euro area liquidity operations.
Theory

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- Excess funding cost of periphery bonds depends on arbitrageurs’ holdings $X_t^*$

$$\Lambda_t = \lambda \cdot \int_0^T X_t^*(\tau) d\tau$$

- Investors’ demand for periphery bonds $Z_t^*$ is uncertain.

$$Z_t^* = -\theta^*(\tau)\beta_t$$ with $\beta_t$ as demand shock

- Market clearing $0 = Z_t^*(\tau) + X_t^*(\tau)$
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- Inconvenience yield

$$icy_t(\tau) \approx \frac{1}{\tau} E_t \int_t^{t+\tau} \Lambda_s ds + \text{Funding risk}$$

- Implications
  1. Inconvenience curve is upwards sloping.
  2. Impact of asset purchases or collateral policy changes are more pronounced on the long end.
Discussion: Theory

Discounting

- Arbitrageurs discount with the risk-free rate. How does it affect the inconvenience yield?
- Calibration of parameters related to the risk-free rate is missing.
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Excess Funding Cost
- Depends on amount of bonds to be financed and constant default probability:

\[ \Lambda_t = \lambda \cdot \int_0^T X_t^* (\tau) d\tau. \]

- Essential ingredient: changes of the integral via \( X_t^* \) add the funding risk.
- Is this true for central bank credit operations? Irrespective of the borrowed sum, the rate paid on liquidity stays the same.
  \( \Rightarrow \) Are excess funding cost really responsive to this part of lending?
Empirical Analysis

**Identify and assess the relevance of inconvenience yields**

- Regress yield or inconvenience yield of Italian bonds on indicator for maturity-related haircut changes.
  - Statistically significant negative impact on yields and, of similar magnitude, on inconvenience yield.
  - Inconvenience cost is an important driver of policy impact on yields!
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- Decompose yield change into credit risk and inconvenience yield-related components for a range of different ECB announcements.
  - Share of inconvenience yield on average 50%.
  - Intuitively: strongest for collateral framework change.
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**Maturity-related impact of purchase programs**

- Focus on announcement effects of PSPP and PEPP: impact on short and long end of inconvenience curve.
  - Longer inconvenience yields fall by more as implied by theoretical results.
Discussion: Empirical Analysis

- Yields in the model are driven by credit risk and the inconvenience yield.
- Differences in the liquidity of the bonds? Inconvenience yield and liquidity are surely quite correlated.
  \[\Rightarrow\] Control for bond liquidity in regressions like in Jiang et al. (2022).
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Robustness of empirical analysis
- Analysis only for Italy. Extend to other countries in your sample?
- Matching of German and Italian bonds to derive inconvenience yield is not always perfect. What if you restrict sample to perfect matches?
- Restrict decomposition of announcement effects to changes of collateral framework related to sovereign bonds. Why not all types of changes?
The motivation focuses on secured lending but, from my point of view, could be even broader. Whenever only a subset of bond is eligible, convenience benefits will arise.

Well-written and interesting paper!

Thank you!
References I