

Funding Constraints and Market Illiquidity in the European Treasury Bond Market

Sophie Moinas

Toulouse School of Economics

Minh Nguyen

University of Newcastle Business School

Giorgio Valente

Hong Kong Institute for Monetary Research

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Summary

Financial markets routinely experience a variety of frictions usually due to the organization of trading in a market, for example transaction costs, or to regulatory constraints, such as short-sale restrictions or market fragmentation. Several studies have recently exposed another source of friction: trading capital. As securities can be used as collaterals to relax borrowing constraints, there is a natural interplay between the ease with which traders can obtain funds (funding liquidity, henceforth) and the ease with which an asset is traded (market liquidity, henceforth).

Theoretical studies show that shocks to funding constraints should affect and be affected by market illiquidity. However, little is known about the empirical magnitude of such responses because of the intrinsic endogeneity of illiquidity shocks. This paper aims at filling this gap and proposes an empirical investigation of the dynamic relationships between funding and market illiquidity in the context of the European Treasury bond market.

We adopt an identification technique based on the heteroskedasticity of the illiquidity proxies to infer the reaction of one measure to shocks affecting the other in a joint setting. Our results suggest that there is clear evidence of a two-way causal response occurring between funding and market illiquidity shocks. It is important to emphasize that while evidence of funding constraint shocks affecting market liquidity is present in the recent literature, it is the first time that the evidence of a reverse causality effect, in a full joint setting, is recorded. In the cross-section, we also show that individual bonds' illiquidity responses to shocks affecting both aspects of illiquidity vary with bond maturity, the credit risk of the issuer, haircuts, and the number of bonds issued by a country.