

# Survey sentiment and option smile

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## Abstract

This paper found that the presence of interest rate smile neither be fully explained by the model misspecification nor by the buying pressure. First, volatility smile obtained from alternative interest rate models is not flat and interest rate smile significantly relates to survey sentiment after controlling fundamental and liquidity variables. Second, a dynamic relation between sentiment proxies and interest rate smiles meets the limit to arbitrage hypothesis, which is the focal point of the market friction. Third, the relation between survey sentiment proxies and option smiles is more pronounced during the crisis period than the pre-crisis and post-crisis period. While investor sentiment drives the smile curve, interest rate models cannot fully capture the smile since these models are formulated in a frictionless environment

Keyword : Survey sentiment; Option smile; Arbitrage; Eurodollar options markets