

Term Structure Dynamics with Macro Factors using High Frequency Data

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This paper empirically studies the role of macro factors in explaining and predicting daily bond yields. In general, macro-finance models use low-frequency data to match with macroeconomic variables available only at low frequencies. To deal with this, we construct and estimate a tractable no-arbitrage affine model with both conventional latent factors and macro factors by imposing cross-equation restrictions on the daily yields of bonds with different maturities, credit risks, and inflation indexation. The estimation results using both the US and UK data show that the estimated macro factors significantly predict actual inflation and the output gap.

In addition, our daily macro term structure model forecasts better than no-arbitrage models with only latent factors as well as other statistical models.