TIPS: Taking Inflation Premium Seriously

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Abstract

This paper asks the question of whether the newly available TIPS yields data can help us achieve a better understanding of the real term structure and the inflation expectations. The yield differential between TIPS and comparable nominal coupon securities is not a direct measure of inflation expectations, because it contains inflation risk premium, and because the TIPS yield may depart from the true "real yield," due to low investor demand especially in the early years. Without using data from the (indexed) real bond market, we cannot fully identify the real interest rate from the inflation risk premium, unless we assume that all information affecting the real term structure is reflected in the nominal bond prices. Even with this assumption, empirical identification of the real term structure is hard to achieve because of the poor measurement and the frequent revisions of the price series. We develop a flexible multifactor term-structure model to allow for suitable specifications of liquidity premium on TIPS, as well as complications caused by lagged indexation. We estimate the model by the Kalman filter using TIPS yields, nominal bond yields, realized inflation and survey data on interest rates and inflation.