

Market price of risk specifications for affine models: theory and evidence

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Abstract

We extend the standard specification of the market price of risk for affine yield models, and apply it to U.S. Treasury data. Our specification often provides better fit, sometimes with very high statistical significance. The improved fit comes from the time-series rather than cross-sectional features of the yield curve. We derive the conditions under which our specification does not admit arbitrage opportunities. The extension has extremely strong statistical significance for affine yield models with multiple square-root type variables. Although we focus on affine yield models, our specification can be used with other asset pricing models as well.

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