The Term Structure of Variance Swaps and Risk Premia

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Yacine Ait-Sahalia (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=16282)
Princeton University - Department of Economics

Mustafa Karaman (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=1456878)
University of Zurich - Swiss Banking Institute (ISB)

Loriano Mancini (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=345154)
Università della Svizzera italiana (USI Lugano); Swiss Finance Institute

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Abstract

We study the term structure of variance swaps, equity and variance risk premia. A model-free analysis reveals a significant price jump component in variance swap rates. A model-based analysis shows that investors' willingness to ensure against volatility risk increases after a market drop. This effect is stronger for short horizons and more persistent for long horizons. During the financial crisis investors demanded large risk premia to hold equities but the risk premia largely depended and strongly decreased with the holding horizon. The term structure of equity and variance risk premia responds differently to various economic indicators.

Keywords: Variance Swap, Stochastic Volatility, Likelihood Approximation, Term Structure, Equity Risk Premium, Variance Risk Premium

JEL Classification: C51, G12, G13

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65 References

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