

Implied Adjusted Volatility by Leland Option Pricing Models: Evidence from Australian Index Options

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Abstract : With the implied volatility as an important factor in financial decision-making, in particular in option pricing valuation, and also the given fact that the pricing biases of Leland option pricing models and the implied volatility structure for the options are related, this study considers examining the implied adjusted volatility smile patterns and term structures in the S&P/ASX 200 index options using the different Leland option pricing models. The examination of the implied adjusted volatility smiles and term structures in the Australian index options market covers the global financial crisis in the mid-2007. The implied adjusted volatility was found to escalate approximately triple the rate prior the crisis.

Keywords : implied adjusted volatility, financial crisis, Leland option pricing models, Australian index options

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