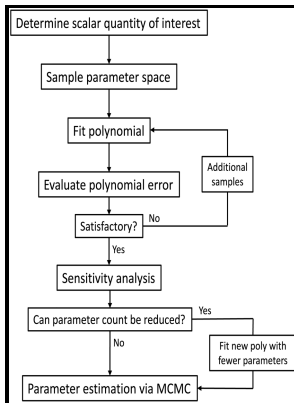


# Option pricing under parameter uncertainty

Graduate School of Business, University of Texas at Austin : distributed by Bureau of Business Research, University of Texas at Austin - Option pricing under model and parameter uncertainty using predictive densities



Description: -

- Electric generators.

Options (Finance) -- Mathematical models.Option pricing under parameter uncertainty

- 79-28.

Working paper (University of Texas at Austin. Graduate School of Business) ;

Working paper - Graduate School of Business, the University of Texas at Austin ; 79-28Option pricing under parameter uncertainty

Notes: Bibliography: leaves [25]-[26]

This edition was published in 1979



Filesize: 29.34 MB

Tags: #Option #pricing #under #model #and #parameter #uncertainty #using #predictive #densities

## Factors That Determine Option Pricing

There, the considered affine process models an intensity, which by definition has to be non-negative. Tegnér gratefully acknowledges support from the Wallenberg Foundations and the Oxford-Man Institute for Quantitative Finance.

## Affine processes under parameter uncertainty

Time to Expiration The effect of time is easy to conceptualize but takes experience before understanding its impact due to the expiration date. A model's predictive density is constructed by integrating its transition density function by the posterior distribution of its parameters.

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## Affine processes under parameter uncertainty

These traders may choose an option rather than the underlying stock due to limited risk, high reward potential, and less capital required to control the same number of shares. Fourier based methods for computing vanilla option values are nowadays the bread and butter in many risk management systems in the financial industry.

## Fast Valuation of Options Under Parameter Uncertainty

This nonlinear affine process yields a tractable model for Knightian uncertainty, especially for modelling interest rates under ambiguity.

Alternatively, one could also enlarge the state space to transform this control problem which is in Lagrange form to one in the Mayer form like in Proposition 2 and Theorem 1 see, for example, Remark 3. After having established a dynamic programming principle, we establish the connection to the nonlinear Kolmogorov equation.

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The resulting RNM gives finite expected payoffs for all parameter values, so that the concerns of Samuelson and Merton were in fact unfounded, while the Carr and Wu restriction is unnecessary. Through a dual representation with backward stochastic differential equations, we obtain explicit equations for Heston's model and investigate several numerical solutions thereof. *Scandinavian Journal of Statistics* 22: 55-71.

### **Optimal Monopolist Pricing Under Demand Uncertainty in Dynamic Markets**

Options can be used in a wide variety of strategies, from conservative to high risk. Time works in the stock trader's favor because good companies tend to rise over long periods of time.

### **Option pricing under model and parameter uncertainty using predictive densities**

Some commonly used models to value options are , , and . Once you have a firm grasp of the essentials, you'll find that options provide flexibility to tailor the risk and reward of every trade to your individual strategies. Option valuation is typically done under the assumption of perfect knowledge about latent states such as stochastic volatility and parameters, an assumption that is rather dubious from a statistical point of view! Density Estimation for Statistics and Data Analysis.

## Related Books

- [Zhongguo gong ye hua yu san nong wen ti yan jiu](#)
- [Sharh-i Makhzan al-asrār-i Nizāmī Ganjah'ī](#)
- [Report by Departments Inspectors on St Colms High School, Draperstown,inspected September, 1993.](#)
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