THE JOURNAL OF
DERIVATIVES

VOLUME 8, NUMBER 4 SUMMER 2001

Springtime finally appears to be asserting itself after a long winter in many regions. And along with the tulips, volatilities are shooting upward, reflecting considerable economic and financial uncertainty around the world. This makes it a good time for derivatives.

The first article in this issue presents a useful enhancement to the credit migration approach in modeling bond default risk. Development of models in this area has represented a steady progression toward greater realism in the default process. Here, Kodera offers a tractable single-factor model for the behavior of credit spreads across bond rating classes that leads to familiar diffusion-like behavior for the interest rate paths. The second article, by Kijima and Muromachi, is on another form of interest rate derivative, the equity swap. The counter-intuitive result from earlier equity swap valuation models is that the swap rate actually depends only on the interest rate term structure and not on the equity price process at all. The authors develop a swap valuation model under stochastic interest rates and find that for some cases, the equity process does affect the swap rate, but only through the correlation between equity returns and interest rates.

Real-world risk management continues to focus heavily on Value at Risk as the measure of risk exposure. But the shortcomings of this concept are well known, one of which is that VaR tells where the critical value of the chosen percentile of the returns distribution lies, but not what the probable outcome will be if the return should fall below that critical value. Our third article describes BVaR ("Beyond VaR"), a more comprehensive risk measure related to VaR, which embodies both the location of the target percentile and the shape of the tail of the probability distribution beyond the VaR level. Following this is another piece related to interest rate instruments. The Heath-Jarrow-Morton (HJM) framework allows great flexibility in modeling the interest rate process, but the cost is often that it becomes tricky mathematically to incorporate the observed market yield curve into the valuation model. In this piece, Ho, Cadle, and Theobald present a one-factor version of the HJM model that is designed to be easily implemented in practice.

The final two articles both look at issues of derivatives market performance. Bharadwaj and Wiggins are interested in pricing

THE JOURNAL OF
DERIVATIVES

efficiency of long-maturity LEAPS options written on the S&P 500 index. Applying non-parametric tests based on put-call parity and the box spread strategy, they show that while puts are overpriced relative to calls most of the time, the mispricing is not great enough to outweigh the transaction costs of making the trades. Lastly, Draper, Mak, and Tang consider the impact of equity warrants in Hong Kong on the market for the underlying stocks. These instruments are an interesting type of derivative that shares some characteristics with exchange-traded call options and with warrants issued by the underlying firms.

This is the last issue in Volume 8 of *The Journal of Derivatives.* Once again, I am very pleased to report that the quality and the quantity of manuscript submissions are stronger than ever. To all current and prospective authors, we say "Thanks!" and "Keep up the good work!" And also, naturally, "So what have you done lately?"

Stephen Figlewski
Editor