This is the first issue in Volume 16 for *The Journal of Derivatives,* which makes the *JOD* 15 years old. It has been a period of rapid development and innovation in the derivatives field, both in the marketplace ("practice") and in the academic world ("theory"), and the articles published in the JOD have been consistently on the cutting edge in both realms. Fortunately, one of the major reasons to launch the *JOD* has long since disappeared: Back in 1992, it was extremely difficult to publish articles on derivatives in any of the top research journals in finance. There was a great need for a journal devoted specifically to derivatives that could serve as an outlet for the important research that was being done in the field. Institutional Investor stepped up to the challenge, offered me the opportunity to serve as Editor, and our first issue came out in the Fall of 1993. The top academic finance journals now publish plenty of first-rate research on derivatives, but the *JOD* has had no problem continuing to attract the kind of articles that we have always specialized in: articles that focus on topics of importance to practitioners and to academics with an interest in real world finance, but that also satisfy the standards of scientific rigor required for academic research.

I am very pleased to report that in the last year, the Web of Science has added *The Journal of Derivatives* to the group of journals for which it tabulates and publishes citation counts. Citations of a professor's work by other researchers are increasingly important in academic promotion and tenure decisions, with the Web of Science as the standard source. So inclusion in their list of journals (which is quite unusual for a practitioner-oriented publication) is an important step for the *JOD*. It is an external stamp of approval for the quality of the journal, and it will help academics get full professional recognition for the articles they publish in the *JOD*. Authors: Don't hold back! Send us your best stuff!

As derivative instruments have become more complex, it has been increasingly necessary to use simulation methods for valuation and risk management. Achieving sufficient accuracy in Monte Carlo simulation can require a large amount of computer time, and the problems become exponentially more time-consuming as the number of stochastic factors involved grows larger. This issue of *The*

Journal of Derivatives starts off with a new variance reduction technique that is especially useful for multivariate problems. The standard procedure to generate factors with a given correlation structure is to start by simulating independent factors and then to multiply them by an appropriate matrix to produce the desired correlation. But in a finite sample, variables simulated to be independent will not have sample correlations that are exactly zero. Wang's idea, which works extremely well, is to transform the initial almost-independent variables to make them perfectly uncorrelated within the sample, and then transform a second time to produce a simulation sample with exactly the right correlation structure.

One sign of the increasing complexity of derivative instruments and derivative models is that in many cases it is no longer adequate to assume asset returns are driven by a diffusion process with a single stochastic factor and constant volatility. Even stochastically time-varying volatility within a diffusion model is unsatisfactory for many kinds of securities, because their returns exhibit occasional discrete jumps. If the underlying asset follows a jump-diffusion process, it is still possible to derive closed-form solutions for European options, but not for American options. In our second article, Beliaeva, et al., show how to construct a lattice model for short-term interest rates that captures both the diffusion component and the jump component of returns.

The third article also develops an innovative lattice model, in this case for pricing employee stock options (ESOs). The purpose is to take account of the dilution that takes place when an ESO is exercised and also the interactions between the exercise decision for one option issue and the valuation and optimal exercise strategy for the other outstanding ESOs. After that, Meng and ap Gwilym turn their attention to market liquidity, another of the current hot topics in financial research, to examine the determinants of the bid-ask spreads on credit default swaps.

In our last article Crouhy, Jarrow, and Turnbull provide a comprehensive review of the current subprime mortgage crisis. The article is in a somewhat different vein from most JOD articles that concentrate especially on new research, but we expect our readers will find it quite valuable. The article makes it clear that the actions of many diverse parties contributed to the problems we are facing today. The authors first explain in detail how the credit crisis developed, and they then propose changes to the system that could be most helpful in avoiding similar problems in the future.

As the summer fades and the pace of life accelerates again, post-Olympics and post-Labor Day, we offer best wishes to all of our readers for a productive, successful, and bankruptcy-remote Fall season.

Stephen Figlewski
Editor