

D THE JOURNAL OF **DERIVATIVES**

VOLUME 11, NUMBER 4 SUMMER 2004

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Usually, I like to start the Editor's Letter with some reference to current events in the real world. But at this time, mid-May 2004, current events are too demoralizing. There is much too much volatility, and we don't seem to have any attractive options.

Having a good forecast of volatility is essential to derivatives trading, risk management, portfolio selection, and pretty much every other application of modern financial theory. A lot of different approaches to volatility prediction have been developed, and much research has been devoted to trying to determine which one works best. But a very common finding is that none of the methods tested seems to be conditionally unbiased, in the sense that the realized volatility is equal to the forecasted volatility plus a zero mean random error. The typical conclusion from this is to acknowledge that none of the methods is unbiased and to suggest that the least bad one is the preferred choice. But constraining oneself to pick one of the biased forecasts ignores the fact that the unbiasedness test itself provides information on how to correct the bias. In our first article, Harris and Shen look at removing the bias from volatility forecasts in this way, and they show that significant improvement in performance is possible, particularly in a VaR application.

The next paper, by Episcopos, looks at the impact of adding optionality in a firm's capital structure. It is well understood that the ability of a firm to go bankrupt and pay bondholders less than face value on their claims is a valuable option to the stockholders and an important factor in the valuing the bonds. Junior debt has more complicated optionality. Here, the focus is on a firm that has stock and bonds outstanding, and also a significant contingent liability in the form of call options written on some underlying asset. This additional optionality impacts all of the other firm securities in interesting and important ways. The third article is by Kupiec, who also focuses on optionality in the capital structure, in this case that of a bank whose deposits are insured by the government. The insured bank acquires an option that it does not have to pay for (allowing it to pay interest on deposits with no premium for default risk). As Kupiec shows, this creates an incentive for the bank to take more risk and to hold less capital than an otherwise identical uninsured bank.

For options on portfolios and exotic contracts whose payoffs depend on the relative performance of more than one underlying, correlation forecasts are needed, along with volatilities. Since there are few sources of option-implied correlations, statistical techniques

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based on past returns are typically used. But the estimation noise in historical correlations induces uncertainty in the model values for multiasset options. In the next article, Fengler and Schwendner offer a bootstrap technique for estimating the correlation estimation risk and show what this translates to in terms of the bid-ask spread on the options. Andricopoulos, Widdicks, Duck, and Newton then offer a simple technique for efficient option valuation in a lattice or other type of grid approximation technique. The efficiency gain increases sharply as the number of dimensions increases. The final article, in the Innovations section, describes the latest in a long line of securitized products: the Collateralized Fund Obligation, which securitizes and tranches a fund of hedge funds.

Let me end by offering our very best wishes to all of this year's newly minted college graduates (including the editor's own daughter). And especially to their parents, heroes who have contributed mightily over the years to get to this day.

Stephen Figlewski
Editor