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The leaves are pretty much fallen and cold weather has arrived, at least in New York, but it looks like spring may be returning in the economy. The first few buds of new growth are beginning to appear and many signs seem to be pointing toward a more temperate economic climate ahead, including warnings to Alan Greenspan in the financial press that he needs to start worrying about raising interest rates to keep the economy from overheating. But who knows? This might be only a false start, with true spring still a long time off. Well, it all adds up to volatility. And despite its generally bad reputation, most derivatives professionals like volatility. It's during turbulent conditions that the greatest profit opportunities turn up. All of which makes derivatives trading just a little like the bond market, where bad news is good and good news is bad.

But, of course, good research is never out of season. The subject of the first article in this issue is the perennial derivatives research topic of understanding and predicting the behavior of option implied volatilities. An implied volatility is embedded in every option price. The CBOE constructs and publishes two implied volatility indexes, the VIX based on the S&P 100 index (OEX) and the VXN, based on the Nasdaq 100 (NDX). The methodology for computing these indexes has recently been updated, and they plan to begin trading volatility futures contracts VIX within a few months. Here David Simon explores the behavior of the (old) VXN index and finds that it does not appear to be just the market's forecast of future volatility. He finds that the VXN substantially overpredicts the subsequent realized NDX volatility and also exhibits several features that suggest it is at least partially (as advertised by the exchange) a "fear index."

A subject of considerable public debate right now is how (and whether) to report the value of employee stock option (ESO) grants in a company's financial statements. In our second article, Gurupdesh Pandher addresses the critical question of how ESOs should be valued, independent of how the values will be reported. The Black-Scholes model does not take account of the impact of termination of employment on option status. But severance typically leads to a substantial change in the terms of an ESO, which can have a large impact on option value. Pandher explores the valuation problem when there are multiple types of severance events with different option contingencies.

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The third article considers how to handle an important, but largely unmodeled, asset class within the modern framework for pricing interest-dependent securities. Chatterjea et al. consider how to build a valuation model for a bank's portfolio of credit card loans. The fourth article, although quite different, also shows how to adapt an existing valuation approach to a new class of security. Choi and Jameson devise a clever technique for pricing lookback options in a standard binomial tree, even though they are path-dependent. The secret is a particular strategy for efficient backward induction through the lattice. Finally, Navas points out a common error in the way various authors in the literature have estimated volatility when an option's underlying asset follows a standard type of jump-diffusion process. He shows how to compute volatility properly and explores how much this affects option pricing.

It is still a few weeks before Thanksgiving right now, but by the time you are reading this, it will be time to wish everyone a Happy Holiday and a Volatile Successful New Year.

Stephen Figlewski
Editor