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Everywhere one looks, risk and uncertainty abound, whether one is watching the Winter Olympics, reading the U.S. government's most recent budget projections, pondering the future of the Middle East, or simply trying to get home in the middle of a winter storm that is dumping snow on one's home airport. The subjectivity and heterogeneity of risk attitudes is illustrated by the fact that it is the last of these that is currently of most concern for your humble Editor. This Editor's Letter is being written at 35,000 feet, en route to O'Hare airport where a tedious and very probably fruitless wait for the remote possibility of a standby seat on a flight onward to New York is in store. There are no comforting lognormal diffusions and, alas, no options.

Turning to more manageable subjects, the first paper in this issue is about volatility, or more precisely, volatility indexes. The Chicago Board Options Exchange's VIX index was introduced in 1993 as a measure of expected volatility in the stock market, or at least the volatility of the S&P 100 stock market index, as reflected in the implied volatilities of at-the-money 1-month index options. The VIX quickly became a closely watched indicator of market conditions, although there has always been some uncertainty about exactly what it measured. Is it really the market's best prediction of the standard deviation of returns on the index over the next month, or is it capturing a more subjective market "fear factor," reflecting risk aversion and "crash-o-phobia" more than an informationally efficient volatility forecast. Recently the CBOE revised the formula for the VIX, retaining the old version as the VXO index. Carr and Wu give a thorough analysis of the VIX, both old and new, including a demonstration that the difference in the calculation methods produces a subtle, but key, difference in the ability to replicate the index in the market and therefore in the ease with which derivatives based on the index may be hedged.

Our second article, by Ammann and Seiz, examines mandatory convertibles. These are about the most equity-like in the gamut of over the counter hybrid derivatives with features of fixed-income securities and equities. Like straight convertible bonds, they pay a regular coupon at the outset, but at a fixed date, they automatically convert into common stock. The conversion ratio is a function of the stock price, however, and is set so that the payoff has a

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fixed dollar value—like a bond's principal—so long as the stock price lies in a middle range. Outside the range, the conversion ratio becomes a fixed number of shares, giving equity market participation on both the upside and the downside. Market prices for mandatory convertibles appear to be consistent with the valuation model, more so than is typical for straight convertibles.

The third paper looks at whether market prices for interest rate derivatives fully impound a seemingly anomalous but, as the authors show, very regular feature of the US money market: the sharp rise in short term interest rates during the month of December. They provide clear evidence that the end of the year is quite different from other periods for LIBOR, but the Eurodollar futures and options markets largely impound the behavior, even though neither futures prices nor option implied volatilities are fully efficient forecasts.

Finally, in this issue's Innovations section, Stone and Zissu describe one of the latest ideas in creating liquid securities from illiquid ones, by redistributing the impact of an important nonmarket risk through securitization. The process provides new financial vehicles for investors, as well as some new financial possibilities for a class of people who are plainly in need of them. Through life settlement contracts, people with terminal illnesses who have life insurance policies may be able to sell claims on their future insurance payouts and access the cash values before they die. The risk to the buyer in such an arrangement is "life extension risk:" the risk that the insured lives past the actuarially expected payoff date. Like prepayment risk in mortgages, this life extension risk can be managed and mitigated through securitization and tranching of pools of life settlement contracts.

On the ground in Chicago, all flights East for the rest of the day have been cancelled. Did resolution of uncertainty produce a significant increase in utility? Well... um... maybe, I guess. But I hope the Olympics come out better.

Stephen Figlewski
Editor

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