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More than a year ago in this page, I mused that U.S. voters in the upcoming presidential primary elections were being faced with quite different options: The Republicans had more than 15 declared candidates, while the Democrats had 1 overwhelmingly dominant name, plus a couple of almost unknown opponents. I suggested that the optimal strategy for a candidate on the Republican side was to increase his or her option value by maximizing volatility, which seems to be very much what has happened: Donald Trump turned out to be the most volatile candidate by a wide margin; he swept the field and was nominated in July as the party's 2016 candidate for president. The problem is that the value of volatility is greatly diminished in the general election. The electorate now must decide whether to exercise the Trump option and make a long-term commitment to a president who is more volatile than any major party candidate in the last century. Volatility is value-enhancing when one is holding an option, but it is undesirable to an investor in the underlying asset. The less volatility-loving professional politicians on the Republican side are deeply concerned.

On the Democratic side, the Hillary option was so deep in the money a year ago that it seemed unassailable. This was correct in the end, even though the high-volatility Sanders alternative turned out to have a lot stronger appeal than expected, especially with young voters. But many of his proposals ("Break up all of the big banks! Impose major tax increases on the wealthy!") would likely have faced as much powerful opposition in practice as building a wall across more than 1,000 miles of the U.S. southern border and getting Mexico to pay for it. In the end, the voters' preferences for stability won the day, and they opted for "incremental and boring" Hillary over "exciting but impractical" Sanders.

Where this leaves us, though, is quite strange. Surveys have universally shown that this year's race for president of the United States is between two candidates who are each actively disliked by well over half of the voters. It is a lot like being forced to buy one of two bonds that have negative yields to maturity: You just have to hold your nose and pick one. Here the choice is essentially between a low-risk investment-grade bond whose quoted yield is negative versus a speculative issue that *promises* a higher yield but with much greater uncertainty about the actual return.

It will be an interesting campaign. Watch this space for the post-election recap in the Winter 2016 JOD. In the meantime, let us turn our attention to the present.

This issue of *The Journal of Derivatives* features five very interesting and useful papers. In the first, Ye proposes a simplifying assumption about the joint returns distribution for a set of correlated assets, which can enormously improve numerical valuation for derivatives whose payoffs depend on multiple assets. The trick is to adopt the familiar single-index framework from CAPM (capital asset pricing model) theory, which effectively turns numerical integration over a multifactor density into a single-factor integration plus an analytical component. Then, Chateauneuf, Mostoufi, and Vyncke offer a different way to improve Monte Carlo simulation, with a new type of control variate. Comonotonicity is a concept closely related to correlation, but much stronger. A comonotonic upper bound for a function of correlated returns—that is, the upper bound if the correlated variables were actually comonotonic—can be computed very quickly. It is a noisy estimate of the solution to the problem, but as the authors show, it can serve remarkably effectively as a control variate.

Next, Lehnert's article looks at whether cash flows into and out of mutual funds, which have been shown to cause measurable price effects on the stocks involved, also impact the prices of index options. He finds a significant effect that is stronger for inflows than outflows and stronger for near-maturity contracts than for distant ones. Following that is an article by Zhang and Fabozzi on the popular SABR (stochastic alpha-beta-rho) model for interest rates. The model allows the probability density for instantaneous rate moves to be normal, lognormal, or a constant elasticity of variance

depending on the value of the beta coefficient (the “B” in SABR). The innovation in estimating this hard-to-calibrate parameter is to bring in hedge performance as a criterion in fitting the model to the market. The final article by Fu, Arisoy, Shackleton, and Umutlu presents a horse race among several potential return predictors constructed from the implied volatility surface, all of which have been proposed in the literature. A couple of the more familiar ones, such as the difference between at-the-money call and put implied volatilities, are shown to have significant predictive power, while others that are examined do not.

Looking over what I have just written, there is an obvious and serious oversight: I have so far neglected to mention the most important current case of voters opting for the higher-risk strategy. To the astonishment of nearly everyone, in June the British electorate chose to leave the European Union. The magnitude of the political shock was so great, especially for the politicians who pushed most strongly for Brexit, that none of them was willing and able to actually oversee the process of transition that they had fervently promoted. Who knows where this will all lead in the end?

Naturally, the U.S. stock market is responding to all of this uncertainty by hitting new all-time highs and driving the VIX “fear gauge” below 12%. I recommend just buckling our seat belts and hanging on to see what comes next.

Stephen Figlewski
Editor