JOIM

PRACTITIONER'S DIGEST

The "Practitioner's Digest" emphasizes the practical significance of manuscripts featured in the "Insights" and "Articles" sections of the journal. Readers who are interested in extracting the practical value of an article, or who are simply looking for a summary, may look to this section.

A NEW TAXONOMY OF THE DYNAMIC TERM STRUCTURE MODELS

Sanjay K. Nawalkha, Natalia A. Beliaeva and Gloria Soto

Dynamic Term Structure models such as affine models, quadratic models, HJM models, and LIBOR market models are the workhorses for valuation and hedging of interest rate derivatives and credit derivatives. This article develops a new taxonomy for these models, and classifies all term structure models as fundamental models, single-plus models, double-plus models, and triple-plus models. The new taxonomy shows how to extend virtually any fundamental multifactor affine and/or quadratic short rate model to the class of HJM models which allow valuation of interest rate derivatives and credit derivatives consistent with the initially observed term structures of riskless and risky bonds. The new taxonomy also introduces a new class of term structure models known as *single-plus* models, which are time-homogeneous as well as preference-free, two properties which do not hold under any existing class of term structure models. Single-plus models have the potential to resolve the inconsistency between the time-series and cross-sectional estimations of dynamic term structure models. The paper also derives single-plus models consistent with the unspanned stochastic volatility-based term structure models. The new taxonomy should result in a better understanding of the intricate relationships between a plethora of term structure models, and better applications of these models for valuation and hedging of interest rate derivatives and credit derivatives.

This book also has various models that allow Poisson jumps (i.e., 5 to 10 standard deviation events) and stochastic volatility, which can be used to model interest rate processes with higher accuracy. The models can price both interest rate derivatives and credit derivatives in an integrated fashion using the "reduced-form" framework. This is the first book on this topic, which comes with professional quality Excel/VBA software that runs the C/C++ programs at the backend using dll libraries.

EQUALLY WEIGHTED REBALANCING AS THE AVERAGE OF ALL INVESTMENT STRATEGIES   PAGE 27

Masahito Shimizu

Performance evaluation is an important step in investment management, for both sponsors and portfolio managers. The more precise the measurement, the better the estimation of opportunity cost that the sponsors can make. A precise measurement also provides clear knowledge of portfolio managers' strong points and weaknesses. For precise measurement, it is very useful to know where the actual performance of a manager lies in the opportunity set of possible performances. In this regard, we offer an approach to setting the level and the extent of the opportunity set. We investigate the average performance of all possible strategies and how performance varies across strategies. We show that the average is equal to the performance of the equally-weighted rebalancing strategy and that the standard deviation of all the performances during a period is approximately equal to that of all the investment assets' performances divided by the square root of the sum of the number of the assets and one, given certain conditions.

HOW QUICKLY DO EQUITY PRICES CONVERGE TO INTRINSIC VALUE?   PAGE 41

Dennis R. Capozza and Ryan D. Israelsen

This research hypothesizes that in markets where information costs, transactions costs and the economic impact of information can vary widely, we should expect both significant predictability and systematic variation in the predictability. Controlling for other factors, we find that on average, 15-30% of the difference between the stock price and the estimated intrinsic value is removed in a year. We document that levels of predictability vary with firm characteristics like leverage, size and number of analysts. Momentum is stronger for larger firms with more analysts. Reversion to the intrinsic value is greater for smaller firms with more analysts. Since many investment strategies are designed to exploit momentum and reversion, these results shed new light on the effectiveness of these strategies and the resulting equilibria that can arise from them.

THE RULE OF 72 FOR LIFETIME SAVINGS   PAGE 54

Thomas K. Philips

Financial planners often impress upon their clients the power of compounding by quoting them the Rule of 72: With annual compounding, a dollar invested in an investment account at a constant interest rate of r% per annum grows to two dollars in approximately $72/r$ years. In this note I show that the Rule of 72 is easily extended to lifetime savings: If an investor invests one dollar at the start of each year over the course of her working life at a constant interest rate of r% per annum, approximately half the terminal value of her account can be attributed to the first $72/r$ years of contributions. The result, while simple, seems not to be well known, and has repeatedly proven useful when counseling young investors on the importance of saving for retirement from an early age, particularly when their primary retirement vehicle is a 401(k) plan.

WHAT'S THE BEST WAY TO TRADE USING THE JANUARY BAROMETER?   PAGE 58

Michael J. Cooper, John J. McConnell and Alexei V. Ovtchinnikov

For years, investments managers have been intrigued by the adage "As goes January so goes the rest of the year." This popular bit of streetlore predicts that the market return in January provides useful information to would-be investors in that the January market return predicts the market return over the remainder of the year. This adage has become known as the January Barometer.

In an earlier paper (Cooper, McConnell and Ovtchinnikov, 2006) we investigated the power of the January market return to predict returns for the next 11 months using 147 years of U.S. stock market returns. We found that, on average, the 11-month holding period return following positive Januarys was significantly higher, by a wide margin, than the 11-month holding period return following negative Januarys.

In this paper we update that analysis through 2008 and address the question of how an investor can best use that information as part of an investment strategy. We find that the best way to use the January Barometer is not the obvious one of being long following positive Januarys and short following negative Januarys, but to be long following positive Januarys and invest in t-bills following negative Januarys. This strategy beats various alternatives, including a passive long-the-market-all-the-time strategy, by significant margins over the 152 years for which we have data.