

# The Journal of FIXED INCOME

VOLUME 25, NUMBER 4

SPRING 2016

**STANLEY J. KON** Editor  
**BOBBIE GRIFFIN** Editorial Assistant

**HARRY KATZ** Content Production Director  
**DEBORAH BROUWER** Production/Design

**CATHY SCOTT** Content Director

**DESSI SCHACHNE** Marketing Director  
**DENISE ALIVIZATOS** Marketing Manager

**ANTON BORISSOV** Business Development Manager

**WILLIAM LAW** Regional Sales Manager

**DEWEY PALMIERI** Reprints Manager

**CHERLY BONNY** Customer Service Manager

**BEN YARDENI** Finance Manager  
**NICOLE FIGUEROA** Business Analyst

**BRUCE MOLINA** Digital Advertising Operations

**DAVID ANTIN** CEO  
**DAVE BLIDE** Publisher

Liquidity has always been a risk factor for investors on an individual security basis. But the financial crisis of 2008 provided a clearer picture of the existence of a macro, systemic, or systematic liquidity risk factor that is present at the portfolio level. We begin this issue of *The Journal of Fixed Income* with an article by Ren-Raw Chen, Wei He, and Wenling Lin that provides a liquidity index to compute the discount due to illiquidity apart from other risks. By applying this liquidity index to the financial sector, they find that large banks suffered more liquidity discounts than smaller banks. The financial crisis also created more suspicion concerning the usefulness of credit ratings. In the second article, Florian Kiesel empirically demonstrates that during the crisis, the credit default swap market did not respond to rating announcements and that stock prices had already anticipated rating announcements.

The research literature has a long history of using stock market information to infer bond valuations (structural models). For trading strategies, the direction is predicated on information being first absorbed by the more liquid stock market and then transferred to the bond market. There are times, however, when the bond market leads the stock market. In the next article, Hans Byström considers an innovative approach to assessing stock prices through bond market information by inverting the CreditGrades model to back out credit-implied stock prices and volatilities from default swap spreads. Day-to-day movements are significantly correlated with actual stock prices. He also devises a credit-implied volatility index. In the following article, Michael B. McDonald IV investigates the relationship between investor demand for bonds and the capital structure decisions of firms. After controlling for other variables, he finds that management responds by increasing bond issuance when demand is higher as well as when spreads to Treasury rates are lower.

Embedded options are what make bonds interesting and difficult to value. As a bond moves through time, its effective duration changes because of rate changes (an effect of prepayment and credit options) and the time to maturity diminishes. In their article, Vincenzo Russo and Frank J. Fabozzi propose a model in which the volatility of a coupon bond is a function of its stochastic duration. They then show that the price of an option can be derived in the context of the one-factor Hull-White model and applied to valuing bonds with information from swaptions.

Finally, Jyh-Bang Jou and Tan (Charlene) Lee model and analyze the effects on the prepayment option as the interest rate differential between fixed- and floating-rate mortgages changes.

We hope you enjoy this issue of *The Journal of Fixed Income*. Your continued support is greatly appreciated.

**Stanley J. Kon**  
Editor