Heiner Beckmeyer (Universität Münster)

Title: A Joint Factor Model for Bonds, Stocks, and Options

Abstract: Motivated by structural credit risk models, we propose a parsimonious reduced-form joint factor model for bonds, options, and stocks. By extending instrumented principal component analysis to accommodate heterogeneity in how firm characteristics instrument the sensitivity of bonds, options, and stocks, we find that our model is able to jointly explain the risk-return tradeoff for the three asset classes. Just five factors are sufficient to explain 17% of the total variation of bond, option, and stock returns; these five factors leave the returns of only eleven out of 219 characteristic-managed portfolios unexplained. Finally, we investigate the patterns of commonality in return predictability.