

## Peter Christoffersen: “Forward-looking Betas”

### Abstract:

Few issues are more important for finance practice than the computation of market betas. Existing approaches compute market betas using historical data. While these approaches differ in terms of statistical sophistication and the modeling of the time-variation in the betas, they are all backward-looking. This paper introduces a radically different approach to estimating market betas. Using the tools in Bakshi and Madan (2000) and Bakshi, Kapadia and Madan (2003) we employ the information embedded in the prices of individual stock options and index options to compute our forward-looking market beta at the daily frequency. This beta can be computed using option data for a single day, and is able to reflect sudden changes in the structure of the underlying company. Based on an empirical investigation of daily cross-sections of option contracts on thirty underlying companies, we conclude that these forward-looking betas contain information relevant for forecasting future betas that is not contained in historical betas.