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A COMPARABLES APPROACH TO MEASURING CASHFLOW-AT-RISK FOR NON-FINANCIAL FIRMS

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Abstract

Cashflow-at-Risk (C-FaR) is an attempt to create an analogue to Value at Risk (VaR) that can be used by non-financial firms to quantify various kinds of risk exposures, including interest rate, exchange rate, and commodity price risks. There are two basic ways to attack this problem. One is from the "bottom up," which involves building a detailed model of all of a company's specific exposures. The C-Far approach presented here is a "top-down" method of comparables that looks directly at the ultimate item of interest—the companies' cashflows. The fundamental challenge facing the top-down strategy is that, for any one company, there is not enough data on its own cashflows to make precise statements about the likelihood of rare events. To get around this problem, the authors match a target company with a large set of comparable companies that are expected to have similar cashflow volatility. The comparables are chosen to be close to the target company on four dimensions: (1) market cap; (2) profitability; (3) industry risk; and (4) stock price volatility.

C-FaR can be useful to managers addressing a variety of corporate finance decisions. For example, by providing estimates of the probability of financial distress, the C-FaR method can be used in conjunction with capital structure data to help formulate debt-equity tradeoffs in a more precise, quantifiable fashion. It can also be used to evaluate a firm's overall risk management strategy, including the expected benefits of using derivatives to hedge commodity-price exposures or the purchase of insurance policies. Moreover, C-FaR may even have a use in investor relations: by disclosing the results of a comparables-based C-FaR analysis ahead of time, a company may be able to cushion earnings shocks by furnishing investors or analysts with credible, objective estimates of what is likely to happen to their cash flows under different economic scenarios.