



Project Group Business & Information Systems Engineering

## Industry Cost of Equity Capital: European Evidence for Multifactor Models

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## Abstract

We estimate the costs of equity capital for 117 industries from 16 European countries employing the CAPM and eight multifactor asset pricing models as well as a variety of different econometric techniques. In doing so, we extend previous research on cost of equity estimation in mainly two ways. First, our study involves European instead of US or UK industries, which are investigated in previous research, and we find that cost of equity estimates obtained from the CAPM or multifactor asset pricing models are as imprecise for European industries as for US and UK industries. Second, in addition to the CAPM, the Fama and French (1993) three-factor model, and the Carhart (1997) four-factor model, which are usually employed, our study includes six multifactor models that have not yet been examined on their ability to provide precise estimates of the costs of equity: the five-factor model of Fama and French (1993) as well as the multifactor models of Pástor and Stambaugh (2003); Campbell and Vuolteenaho (2004); Hahn and Lee (2006); Petkova (2006); and Koijen, Lustig, and Van Nieuwerburgh (2010). Our results suggest that these models provide even more imprecise cost of equity estimates. One main reason for these inaccurate estimates is the large temporal variation of the risk loadings on the non-traded factors in these models.

JEL classification: G12; G31

Keywords: Asset Pricing; Cost of Equity Capital; Europe; Firm Valuation; Multifactor Models

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