Risk-adjusted Stock Returns and Accounting Based Performance Measures – Evidence from US listed Electric Utilities 2001 - 2010

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Introduction

This study examines the cross-section returns of US electric utility companies. In the context of this paper performance is defined as change in stock price added with dividend yield for the current year. By applying multi-factor models we investigate the relationship and sensitivities between stock return and nine different accounting- and market based variables. This empirical analysis is based on a ten year data set for the period 2001 to 2010. Our approach contributes to the understanding of what characterizes superior performing companies, hence giving input to the construction of prospective portfolios. Moreover, utilities in general, are by Cassidy (1999) highlighted to be a sector of great interest for investors due to being providers of essential services, as well as tending to be natural monopolies; despite market deregulations, the entry costs remains the same. Cassidy's claim is confirmed by a recent study by Artmann et al. (2012) in their article on German stock returns. They find that utilities are delivering higher mean return and lower standard deviation than other industry portfolios. Furthermore, by comparing the return on S&P 500 with an un-weighted investment in our sample, the latter would have given app. 2,5 times the return on the S&P 500. In spite of these claims, and the enormous numbers of studies on business performance (Fitzgerald 2007) and cross-section of equity market returns (Subrahmanyam 2010), surprisingly there are hardly any studies of electric utilities. Our paper contributes to closing this gap.

By applying the combination of market- and accounting figures the article serve the interests of both investors and management: Investors are enabled to make informed decisions about which key figures better suited for explaining return. All variables included are easily accessible and thus potentially highly relevant for investors. Furthermore this makes the study easy replicable. CFOs are given guidelines about which key ratios are explaining performance and thus attention should be directed. One of the functions of management accounting is to ensure appropriate use of resources, which in turn should be reflected in stock market evaluation. Hence, CFOs have a starting point for internal improvement as well as what to pinpoint in their investor relations.

Our study aims at finding if there are certain patterns regarding risk (measured by beta value), size, ownership structure, geography, and a number of accounting based key ratios; free cash flow, cash ratio, market debt to capital, Price/Book (P/B) and Price/Sales (P/S).

When running a fixed effects model we find that Price/Book, Beta, Price/Sales, debt, size and cash are positive significant when it comes to explaining current year's stock return. When running a random effects model we find that Price/Book, Price/Sales, Beta and cash are positive significant. These findings can be supported by other studies; however a positive size effect may be surprising, though it may be due to the sector's capital intensity.