

Public Abstract

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Graduation Term:SP 2016

Department:Business Administration

Degree:PhD

Title:Empirically Identified Industry Classification

The purpose of this paper is to evaluate whether empirical identification of industry exposure can help correct self-reported industry by managers.

The first essay models a market with firms that invest in one or more categories of assets. Firms that invest in assets with similar return correlations are grouped into categories that are comparable to industry groups in the standard scheme of classifying firms into industries based on offering a common product or service. Because these categories are based on objective (correlation) rather than subjective (common product) criteria, use of these categories by investors might have advantages when using industry information to make investment decisions and construct portfolios. We also derive estimable equations to measure firms' exposures to category risk thereby identifying in which category or categories (industries) the firm belongs, and we use simulation to explore the efficacy of three different estimation methods.

The second essay applies an empirical method of identifying industries to a well known finance research question. Do diversified firms trade at a discount?

Prior research examining the diversification discount has come to several conflicting conclusions. In this paper I contend this conflict is the result of sample selection and how diversification is measured. I introduce a new measure of diversification level based on the correlations between industry and firm returns and re-examine whether differential pricing exists across firm diversification levels in the time period of 1973-2013. I find an unconditional diversification premium. However, there is substantial time series variation in the relation between diversification and valuation. This variation is able to reconcile many of the conflicting conclusions in the prior literature.

The third essay questions whether an empirical identification of industries allows a more refined calculation of industry level returns.

This essay provides empirical tests to determine whether industry returns series can be improved upon through creating a new industry return series by empirically identifying which firms should be included in an industry. Given the attention that has been placed on incorrect industry classification it seems relevant to believe that industry level returns that are calculated from mis-classified industries will not be accurate. I employ an iterative method of calculating industry level returns and report statistics on the pros and cons of those returns. Overall I provide evidence that an empirical identification of industry level returns is beneficial.