

A Study of Monthly Mutual Fund Returns and Performance Evaluation Techniques

Mark Grinblatt and Sheridan Titman*

Abstract

This paper empirically contrasts the Jensen Measure, the Positive Period Weighting Measure, developed in Grinblatt and Titman (1989b), and a measure developed from the Treynor-Mazuy (1966) quadratic regression on a sample of 279 mutual funds and 109 passive portfolios, using a variety of benchmark portfolios. The study finds that the measures generally yield similar inferences when using the same benchmark and that inferences can vary, even from the same measure, when using different benchmarks. This paper also analyzes the determinants of mutual fund performance. Tests of fund performance that employ fund characteristics, such as net asset value, load, expenses, portfolio turnover, and management fee are reported. These tests surprisingly suggest that turnover is significantly positively related to the ability of fund managers to earn abnormal returns.

I. Introduction

The development of the Capital Asset Pricing Model (CAPM) in the mid-1960s provided financial economists with a tool for adjusting returns for risk. An important application of this model, implemented by Jensen (1968), (1969),¹ is the evaluation of the performance of managed portfolios. However, this approach to evaluating portfolio performance has been the subject of a great deal of controversy.

There are three major reasons for this controversy: benchmark efficiency, timing, and statistical power. This paper seeks to empirically assess the importance of each of these three issues. We do this by studying the performance of a sample of 109 passive portfolios constructed from securities characteristics and

* Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024, and Carroll School of Management, Boston College, Chestnut Hill, MA 02167, respectively. The authors thank Julian Franks, Bruce Lehmann, David Mayers, Rena Repetti, Jay Shanken, *JFQA* Referee and Associate Editor Rex Thompson, and seminar participants at University of California, Los Angeles, University of California, Berkeley, University of British Columbia, University of Washington, Duke University, Rutgers University, and the Wharton School, University of Pennsylvania, for valuable comments on earlier drafts. The authors also appreciate the contributions of Jim Brandon, Nick Crew, Pierre Hillion, Khai Kan, Haeyon Kim, Erik Sirri, and Mark Tsesarsky, who provided excellent research assistance, and of Bruce Lehmann and David Modest, who supplied monthly factor returns. Titman gratefully acknowledges financial support from the Batterymarch Fellowship program. Both authors acknowledge financial support from the UCLA Academic Senate.

¹An equivalent approach was developed by Treynor (1965). The issues discussed in this paper that apply to Jensen's Measure also apply to Treynor's Measure.