

Measuring Fund Strategy and Performance in Changing Economic Conditions

WAYNE E. FERSON and RUDI W. SCHADT*

ABSTRACT

The use of predetermined variables to represent public information and time-variation has produced new insights about asset pricing models, but the literature on mutual fund performance has not exploited these insights. This paper advocates conditional performance evaluation in which the relevant expectations are conditioned on public information variables. We modify several classical performance measures to this end and find that the predetermined variables are both statistically and economically significant. Conditioning on public information controls for biases in traditional market timing models and makes the average performance of the mutual funds in our sample look better.

THE PROBLEM OF ACCURATELY measuring the performance of managed portfolios remains largely unsolved after more than 30 years of work by academics and practitioners. Standard measures of performance, designed to detect security selection or market timing ability, are known to suffer from a number of biases. Traditional measures use unconditional expected returns as the baseline. For example, an “alpha” may be calculated as the past average return of a fund in excess of a risk-free rate, minus a fixed beta times the average excess return of a benchmark portfolio. However, if expected returns and risks vary over time, such an unconditional approach is likely to be unreliable. Common time variation in risks and risk premiums will be confused with average performance.

* Ferson is from the University of Washington School of Business Administration, Department of Finance and Business Economics DJ-10, Seattle, Washington 98195, and Schadt is from the Edwin L. Cox School of Business, Southern Methodist University, Dallas, Texas 75275-0333. We thank numerous colleagues for comments and helpful discussions, including Connie Becker, David P. Brown, Stephen Brown, Jon Christopherson, John Cochrane, William Goetzmann, Mark Grinblatt, Campbell Harvey, Ravi Jagannathan, Debbie Lucas, Jianping Mei, Ed Rice, the editor René Stulz, Bill Sharpe, Andy Siegel, Karl Snow, and an anonymous referee. Vincent Warther deserves special recognition for providing some of the empirical analysis described herein, and David Modest and Peter Knez deserve thanks for supplying some of the data. This paper was presented in workshops at the Universities of Alberta, Arizona State, British Columbia, California at Los Angeles, Chicago, Notre Dame, Oklahoma, Washington, and at J. P. Morgan Investment Management, and at the following conferences: the 1993 European Finance Association, the 1994 National Bureau of Economic Research Summer Institute, the third annual Osaka Conference on Finance, the 1994 Southwestern Finance Association and the 1994 Western Finance Association. Ferson acknowledges financial support from the Pigott-Paccar professorship at the University of Washington.