Journal of Financial Economics 67 (2003) 249–304
JOURNAL OF Financial ECONOMICS
www.elsevier.com/locate/econbase

How do family strategies affect fund performance? When performance-maximization is not the only game in town

Massimo Massa*

Finance Department, INSEAD, Boulevard de Constance 77305, Fontainebleau Cedex, France

Abstract

This is a first attempt to study how the structure of the industry affects mutual fund behavior. I show that industry structure matters; the mutual fund families employ strategies that rely on the heterogeneity of the investors in terms of investment horizon by offering the possibility to switch across different funds belonging to the same family at no cost. I argue that this option acts as an externality for all the funds belonging to the same family, affecting the target level of performance the family wants to reach and the number of funds it wants to set up.

By using the universe of the U.S. mutual fund industry, I empirically confirm this intuition. I find evidence of family driven heterogeneity among funds and show that families actively exploit it. I argue that the more families are able to differentiate themselves in terms of non-performance-related characteristics, the less they need to compete in terms of performance. Product differentiation—i.e., the dispersion in the "services" (fees, performance) that the competing funds offer—affects performance and fund proliferation. In particular, I show that the degree of product differentiation *negatively* affects performance and *positively* affects fund proliferation.

JEL classification: G11; G23

Keywords: Mutual funds; Market structure; Performance; Behavioral finance

1. Introduction

The most glaring stylized fact about the mutual fund industry is the existence of a very high number of funds, differentiated into market "categories" and belonging to

*Tel.: (33)(0)1-60724481; fax: (33) (0)1-60724045.
E-mail address: massimo.massa@insead.fr (M. Massa).

0304-405X/02/$ - see front matter
PII: S0304-405X(02)00253-2

relatively few families. The number of mutual funds in the U.S. has reached 8,171, more than the total number of stocks traded on NYSE and AMEX added together. Over the period 1990–2000 the number of mutual funds grew from 3,081 to 8,171 while the number of families only slightly increased, from 361 to 431. During the same time, the degree of segmentation of the industry also grew, reaching around 33 different categories.

This fact can hardly be explained in terms of the standard finance literature, not only because there already exists a number of securities presumably sufficient to pursue optimal investment strategies, but also because market segmentation makes it harder to improve absolute performance. Indeed, segmentation reduces the scope and range of activity of the manager and forces him to invest only in the assets specific to the fund's category, potentially hampering his market timing skills.

Few attempts to address this issue and to model the mutual fund industry have been made. Dermine et al. (1991) lay out a model in which mutual funds locate themselves on the portfolio frontier, together with other primitive assets. Massa (1998) argues that market segmentation and fund proliferation can be seen as marketing strategies used by the families to exploit investors' heterogeneity. Category proliferation is justified in terms of the positive "spillover" that having a "star" fund provides to all the funds belonging to the same family. Nanda et al. (2000) develop a model of the mutual fund industry in which management fees and load fees are determined endogenously in a competitive setting. Investors' clienteles and heterogeneity in managerial skills generate different fee structures. Mamaysky and Spiegel (2001) derive from first principles the first equilibrium model of the mutual fund industry in which funds are shown to exist to overcome investors' hedging needs. They analyze mutual funds as trading devices, set up by investors who cannot remain in the market to trade at all times. Khorana and Servaes (1999,2000) empirically analyze the determinants of mutual fund starts, identifying a series of factors that induce the family to set up new funds, such as economies of scale and scope, the family's prior performance, and the overall level of funds invested.

Nevertheless, the link between market structure and family strategies has never been directly investigated, neither from a theoretical perspective nor from an empirical one. Nor has anyone studied the relationship between fund performance and market structure.

I address this issue by studying how mutual funds behave in a framework in which the interaction between fund family and industry structure matters. I show that fund proliferation is an alternative, non-performance-related strategy devised to make inter-fund comparison harder and to increase market dispersion.

In particular, I consider funds as heterogeneous products differentiated in terms not only of fund-specific characteristics but also of family specific ones. Family specific characteristics pertain to the way investors evaluate funds that belong to different families but are otherwise identical in terms of performance and fees. Perhaps the most relevant of these characteristics is generated by the possibility of