

# ON THE REGULATION OF FEE STRUCTURES IN MUTUAL FUNDS

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We offer an alternative framework for the analysis of mutual fund structure and use it to examine the rationale behind existing regulations that require mutual fund adviser fees to be of the “fulcrum” variety. We find little justification for the regulations. Indeed, we find that asymmetric “incentive fees” in which the adviser receives a flat fee plus a bonus for exceeding a benchmark index provide Pareto-dominant outcomes with a lower level of equilibrium volatility.

Our model also offers some insight into fee structures actually in use in the asset-management industry. We find that when leveraging is not permitted and the fee structure must be of the fulcrum variety, the equilibrium fee in our model is a flat fee with no performance component; while if asymmetric incentive fees are allowed and leveraging is permitted the equilibrium fee is an incentive fee with a large performance component. These predictions match observed fee structures in the mutual fund industry and the hedge fund industry, respectively.

## 1. Introduction

This paper has two objectives. The first is to propose a new framework for the modeling and analysis of mutual funds. The second is to use this framework to study the impact of existing regulations that specify admissible compensation contracts in the mutual fund industry. We begin in Sec. 1.1 with an overview of these regulations. Section 1.2 then provides a broad description of the approach we

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suggest, while Sec. 1.3 describes our main findings. A brief summary of the related literature is presented in Sec. 2.

### 1.1. *Existing regulations*

Permissible fee structures in the US mutual fund industry are laid out in the 1970 Amendment to the Investment Advisers Act of 1940. The Act, which is reviewed in Appendix A, allows mutual funds and their investment advisers to enter into performance-based compensation contracts only if the fees are of the “fulcrum” variety, that is, ones in which the adviser’s fee is symmetric around a chosen index, decreasing for underperforming the index in the same way in which it increases for outperforming it. Thus, while the Act does not rule out “fraction of funds” fees in which advisers are paid a fixed percentage of the total funds under management, it does prohibit so-called “incentive fee” contracts in which advisers receive a base fee plus a bonus for exceeding a benchmark index.

The rationale offered for the prohibition of incentive fee contracts is theoretical rather than empirical in nature; that is, the ban has more to do with concerns about the inherent nature of incentive-fee contracts, rather than any actual evidence of abuse. Supporters of the prohibition, both in the SEC and in Congress, have argued that a fee structure which rewards advisers for outperforming a benchmark index without penalizing them for underperforming it provides advisers with an incentive to take excessive risk. Effectively (so the argument goes), such advisers hold an option that gives them the right to exchange a fraction of their portfolio for the benchmark portfolio. The value of this option can be increased by increasing the spread between the standard deviations of the two portfolios, leading to the concern about increased risk.

A little reflection suggests that this line of reasoning is incomplete. By linking choices of risk levels solely to fee structures, it implicitly invokes a “partial equilibrium” assumption that investors are passive and will not change their portfolio allocations in reaction to the altered environment. If, however, investors are active and choose portfolio allocations as optimal responses to fee structures and fund risk levels, it is not obvious that admitting incentive fee structures will lead to increased levels of risk in equilibrium. Indeed, once we move away from the partial equilibrium framework and explicitly model investor reactions, it becomes apparent that equilibrium risk levels are not the only — or even the primary — quantity with which we should be concerned. Since the objective of the legislation is to protect investors, the relevant question should be: does the prohibition of incentive fees lead to an increase in investor *welfare*?

This paper examines, in an equilibrium model, the impact of the existing regulations in two directions: (i) the effect such regulations will have on the form of equilibrium fee structures, and (ii) the extent to which the prohibition on incentive fees can be justified at a theoretical level. Concerning the first question, we find that the results of our analysis correspond very closely to observed reality.