(Not) Everybody's Working for the Weekend: A Study of Mutual Fund Manager Effort

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American Finance Association

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Moral hazard and observability

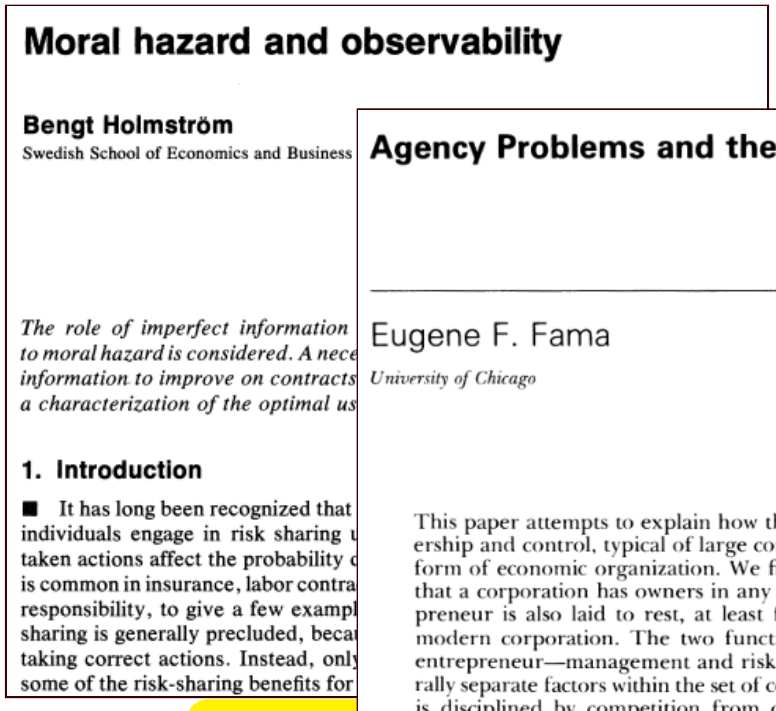
Bengt Holmström
Swedish School of Economics and Business Administration

The role of imperfect information in a principal-agent relationship subject to moral hazard is considered. A necessary and sufficient condition for imperfect information to improve on contracts based on the payoff alone is derived, and a characterization of the optimal use of such information is given.

1. Introduction

■ It has long been recognized that a problem of moral hazard may arise when individuals engage in risk sharing under conditions such that their privately taken actions affect the probability distribution of the outcome.[1] This situation is common in insurance, labor contracting, and the delegation of decisionmaking responsibility, to give a few examples. In these instances Pareto-optimal risk sharing is generally precluded, because it will not induce proper incentives for taking correct actions. Instead, only a second-best solution, which trades off some of the risk-sharing benefits for provision of incentives, can be achieved.

13,455 citations



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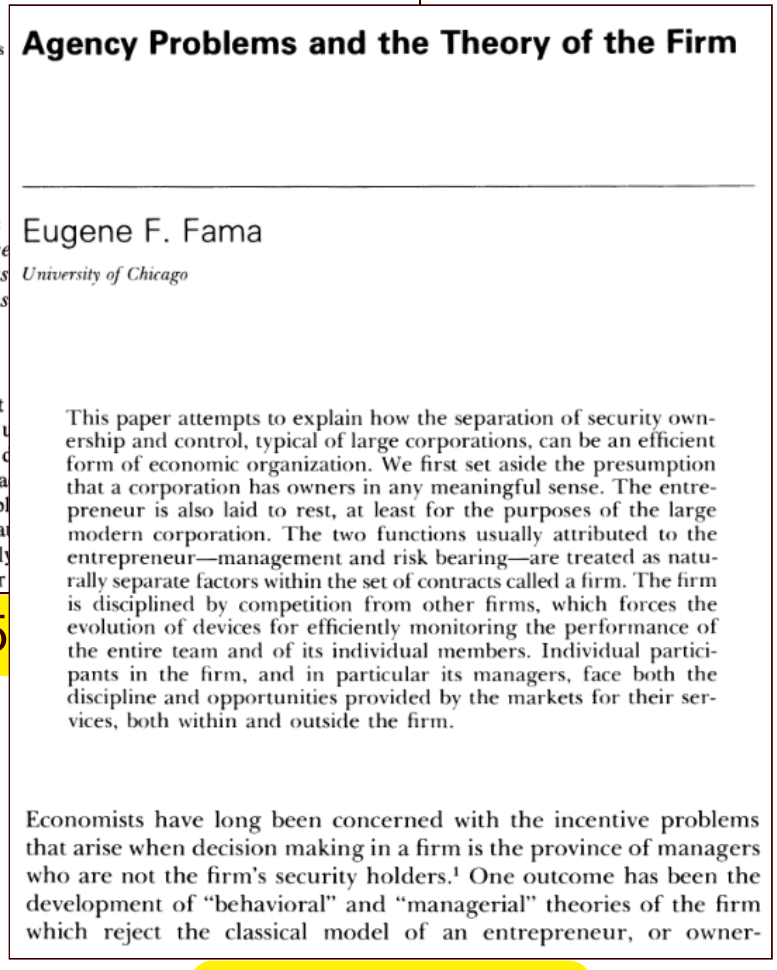

Agency Problems and the Theory of the Firm

Eugene F. Fama
University of Chicago

This paper attempts to explain how the separation of security ownership and control, typical of large corporations, can be an efficient form of economic organization. We first set aside the presumption that a corporation has owners in any meaningful sense. The entrepreneur is also laid to rest, at least for the purposes of the large modern corporation. The two functions usually attributed to the entrepreneur—management and risk bearing—are treated as naturally separate factors within the set of contracts called a firm. The firm is disciplined by competition from other firms, which forces the evolution of devices for efficiently monitoring the performance of the entire team and of its individual members. Individual participants in the firm, and in particular its managers, face both the discipline and opportunities provided by the markets for their services, both within and outside the firm.

Economists have long been concerned with the incentive problems that arise when decision making in a firm is the province of managers who are not the firm's security holders.[1] One outcome has been the development of "behavioral" and "managerial" theories of the firm which reject the classical model of an entrepreneur, or owner-

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Performance Pay and Top-Management Incentives

Michael C. Jensen
Harvard University

Kevin J. Murphy
University of Rochester

Our estimates of the pay-performance relation (including pay, options, stockholdings, and dismissal) for chief executive officers indicate that CEO wealth changes $3.25 for every $1,000 change in shareholder wealth. Although the incentives generated by stock ownership are large relative to pay and dismissal incentives, most CEOs hold trivial fractions of their firms' stock, and ownership levels have declined over the past 50 years. We hypothesize that public and private political forces impose constraints that reduce the pay-performance sensitivity. Declines in both the pay-performance relation and the level of CEO pay since the 1930s are consistent with this hypothesis.

The conflict of interest between shareholders of a publicly owned corporation and the corporation's chief executive officer (CEO) is a

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Journal of Financial Economics 3 (1976) 305–360. © North-Holland Publishing Company

THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE

Michael C. JENSEN and William H. MECKLING*
University of Rochester, Rochester, NY 14627, U.S.A.

Received January 1976, revised version received July 1976

This paper integrates elements from the theory of agency, the theory of property rights and the theory of finance to develop a theory of the ownership structure of the firm. We define the concept of agency costs, show its relationship to the 'separation and control' issue, investigate the nature of the agency costs generated by the existence of debt and outside equity, demonstrate who bears these costs and why, and investigate the Pareto optimality of their existence. We also provide a new definition of the firm, and show how our analysis of the factors influencing the creation and issuance of debt and equity claims is a special case of the supply side of the completeness of markets problem.

> The directors of such [joint-stock] companies, however, being the managers rather of other people's money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master's honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company.
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> Adam Smith, *The Wealth of Nations*, 1776, Cannan Edition (Modern Library, New York, 1937) p. 700.

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ANNUAL REVIEWS

Annual Review of Financial Economics

Conflicts of Interest in Asset Management and Advising

Chester S. Spatt

Tepper School of Business, Carnegie Mellon University, Pittsburgh, Pennsylvania 15213, USA; email: espatt@andrew.cmu.edu

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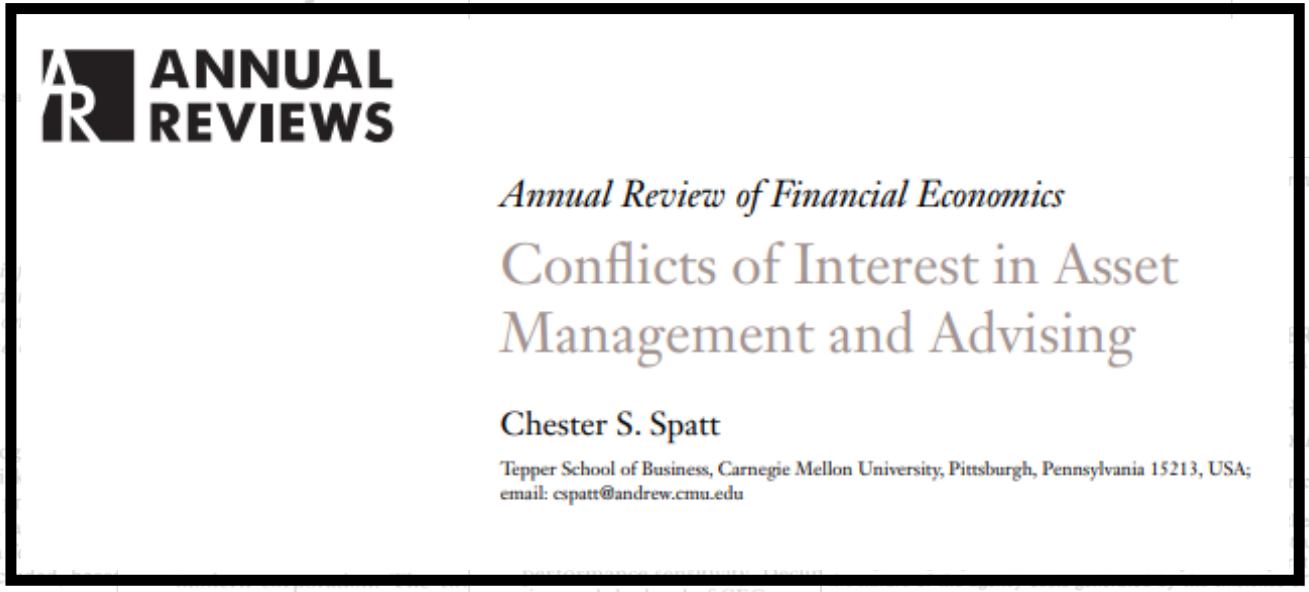

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A common thread here is the unobservability of effort.

Especially true in asset management, where the main input is human capital.

But for researchers, effort is now observable!

10 employees all worked
4 days this week.
40 employee workdays.

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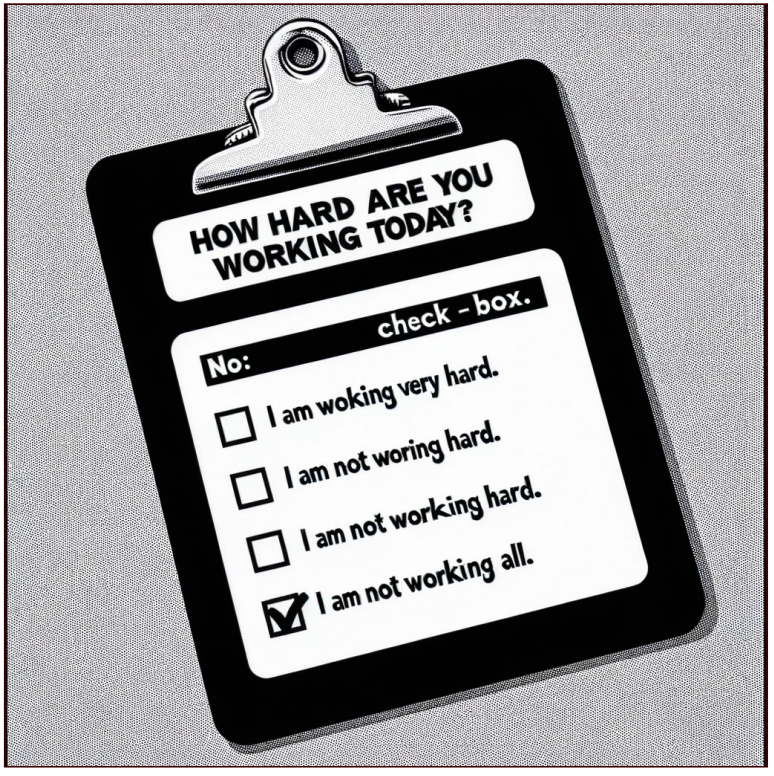
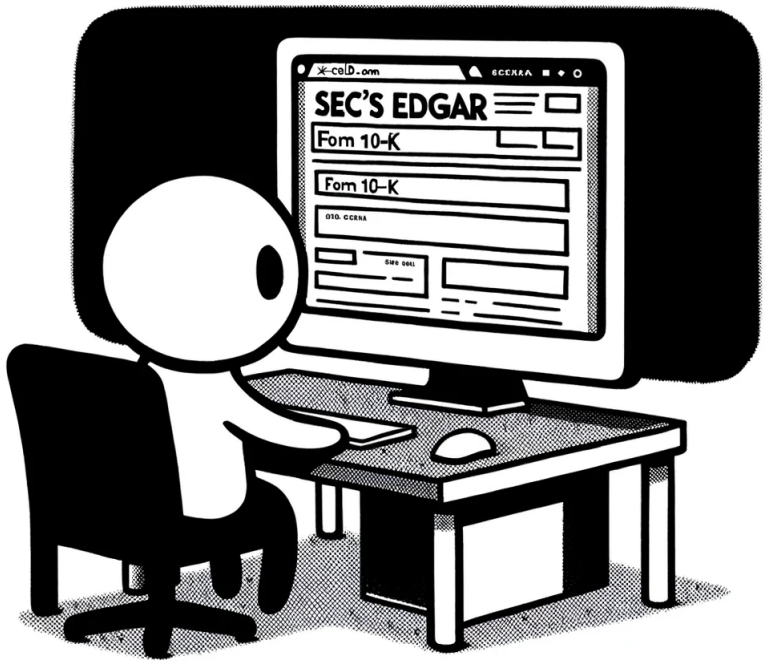
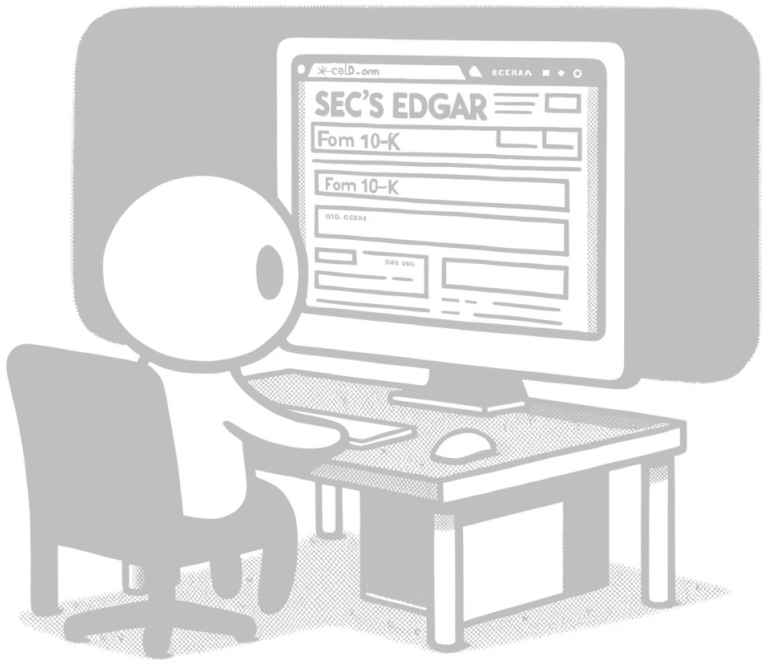


Most employees
claimed they worked
very hard this week.

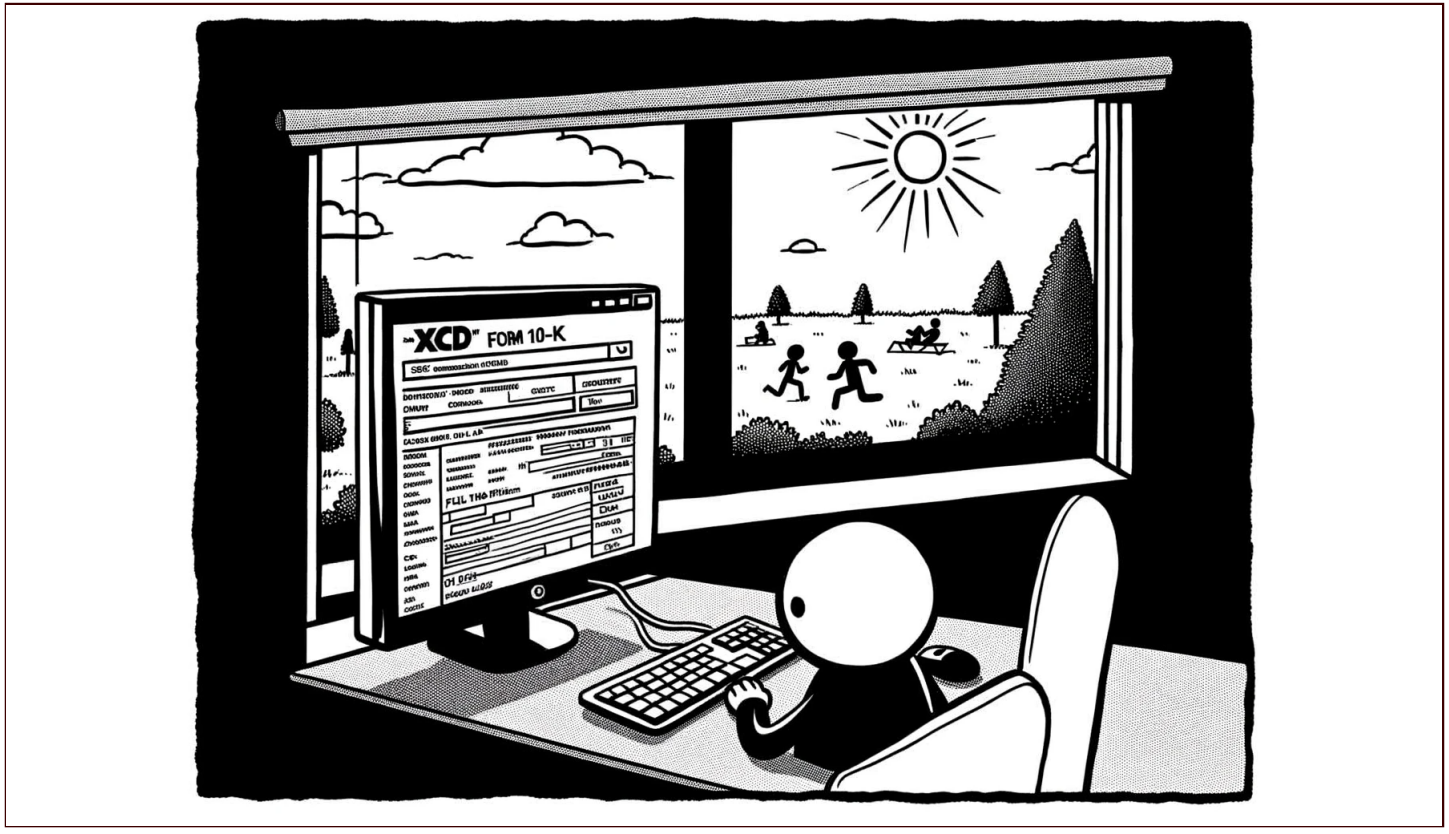


We can tie EDGAR usage to mutual funds and observe their day-to-day activity of viewing (requesting) filings.



We can tie EDGAR usage to mutual funds and observe their day-to-day activity of viewing (requesting) filings.

We aggregate usage at the family-level each month and define *TotalWDs* and *TotalReqs*.



To specifically measure effort, we focus on weekends.
Relatively how many requests came on weekends?

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Relatively how many requests came on weekends?

We define *PctWk* as the ratio of weekend work activities to total work activities over a month's time.

November - February

Large and Expensive Funds

Managers facing many competitive incentives

Following outflows and increased idiosyncratic volatility

Deeper information acquisition and more trading.

Effort leads to higher future returns

Especially for high active share, low turnover, and competitive funds

Effort causes higher future returns

Especially for high active share, low turnover, and competitive funds

November - February

Large and Expensive Funds

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Following outflows and increased idiosyncratic volatility

Deeper information acquisition and more trading.

What follows from effort?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: All Observations.						
	HHI		Turnover		ActiveShare	
$PctWk_{t-3}$	0.16**		-0.29***		0.53	
	(0.07)		(0.10)		(0.88)	
$PctWk_{t-12}$		0.18**		-0.28**		3.76***
		(0.07)		(0.11)		(0.95)
N	23,713	20,865	25,492	20,990	25,564	21,059
R^2	0.53	0.53	0.27	0.27	0.66	0.65

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↑ **Effort** ↑ **Concentration**

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These relations are primarily driven by High Effort

(1)	(2)	(3)	(4)	(5)	(6)
Panel A: All Observations.					
	%UniqueFirms	%UniqueFilings	%10KQ	FilingAge	PctNonHolding
PctWk	-0.32***	-0.47***	-0.09	1.32***	0.14
	(0.08)	(0.09)	(0.06)	(0.46)	(0.09)
N	4,563	4,563	4,563	4,563	4,563
R^2	0.44	0.30	0.45	0.29	0.55

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↑ Effort → acquiring info about fewer firms, fewer filings, and older filings.

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↑ Effort → acquiring info about fewer firms, fewer filings, and older filings.

We also show that effort decreases the likelihood of buying new stocks while increasing the likelihood of buying more of current holdings. Effort and Information Acquisition together increase the likelihood of selling.

Does effort lead to better performance?

(1)	(5)	(6)	(7)
Panel A. All Observations.			
	$Alpha_{1-6}$	$Alpha_{7-12}$	$Alpha_{13-18}$
PctWk	-1.25*	-0.78	2.05***
	(0.68)	(0.61)	(0.69)
N	25,257	25,357	25,513
R^2	0.13	0.12	0.12
Panel B. Observations where PctWk > 0.			
	$Alpha_{1-6}$	$Alpha_{7-12}$	$Alpha_{13-18}$
PctWk	-1.00	-1.52**	1.69**
	(0.78)	(0.73)	(0.79)
N	21,137	21,125	21,185
R^2	0.13	0.13	0.13
Panel C. Observations where MedWk > 1.			
	$Alpha_{1-6}$	$Alpha_{7-12}$	$Alpha_{13-18}$
PctWk	-1.74**	-1.01	1.70**
	(0.77)	(0.77)	(0.73)
N	19,561	19,614	19,675
R^2	0.13	0.12	0.13

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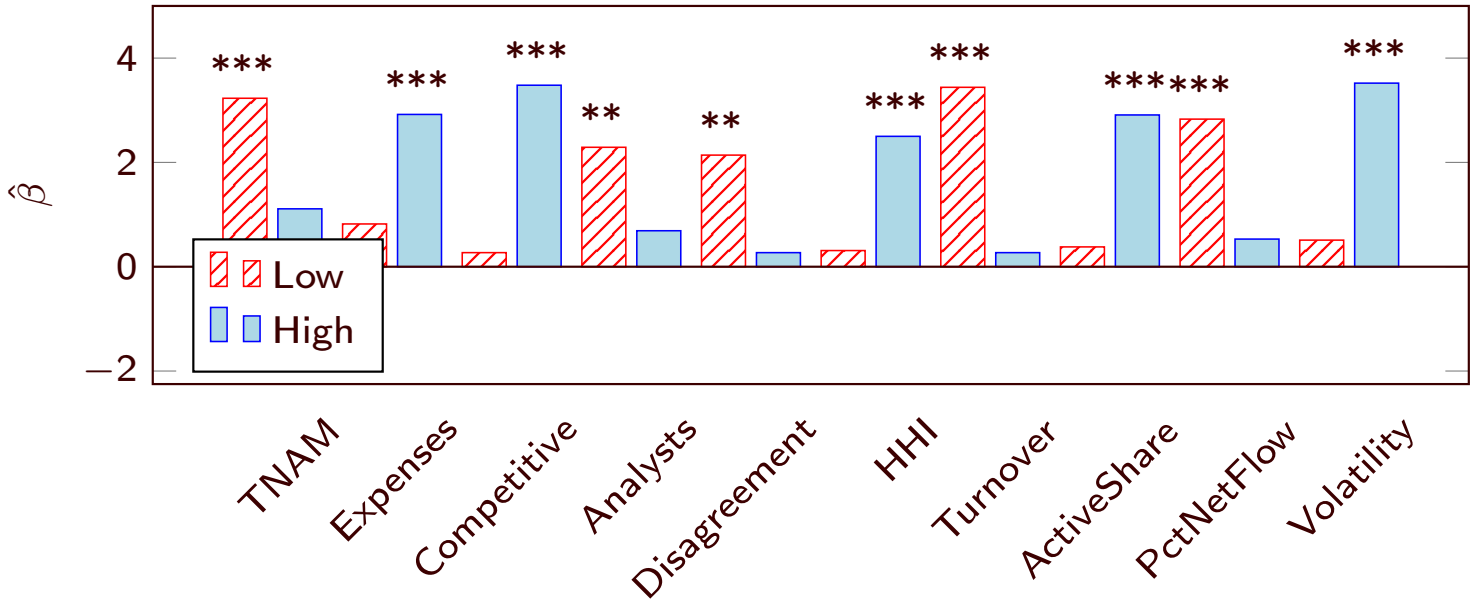
Returns are HIGH after a while

This is the average effect across all managers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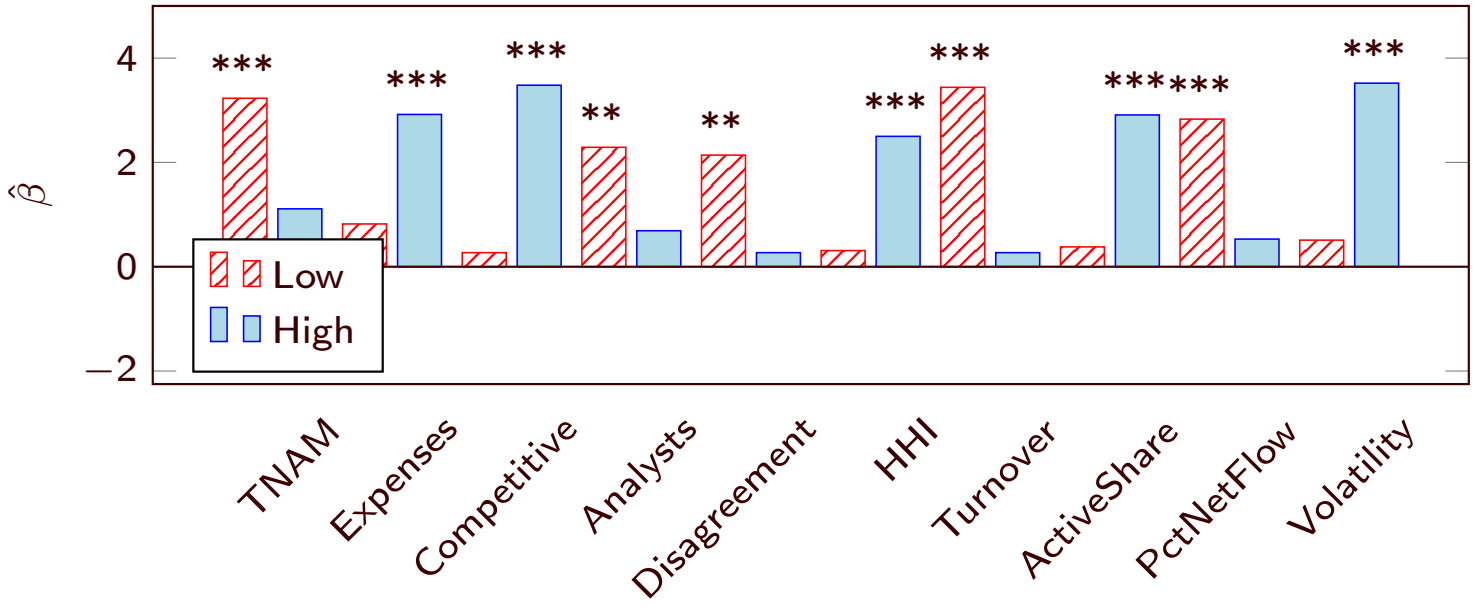
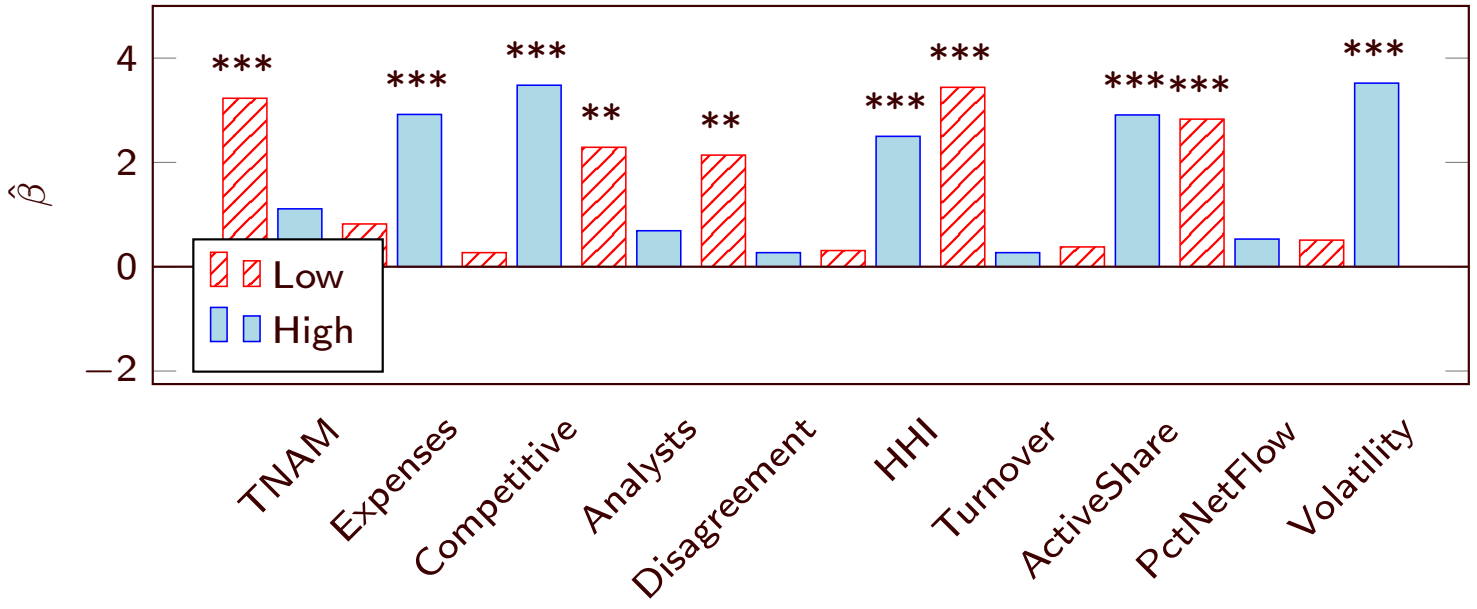
Competitive
Analysts
Disagreement
HHI
Turnover
ActiveShare
PctNetFlow
Volatility

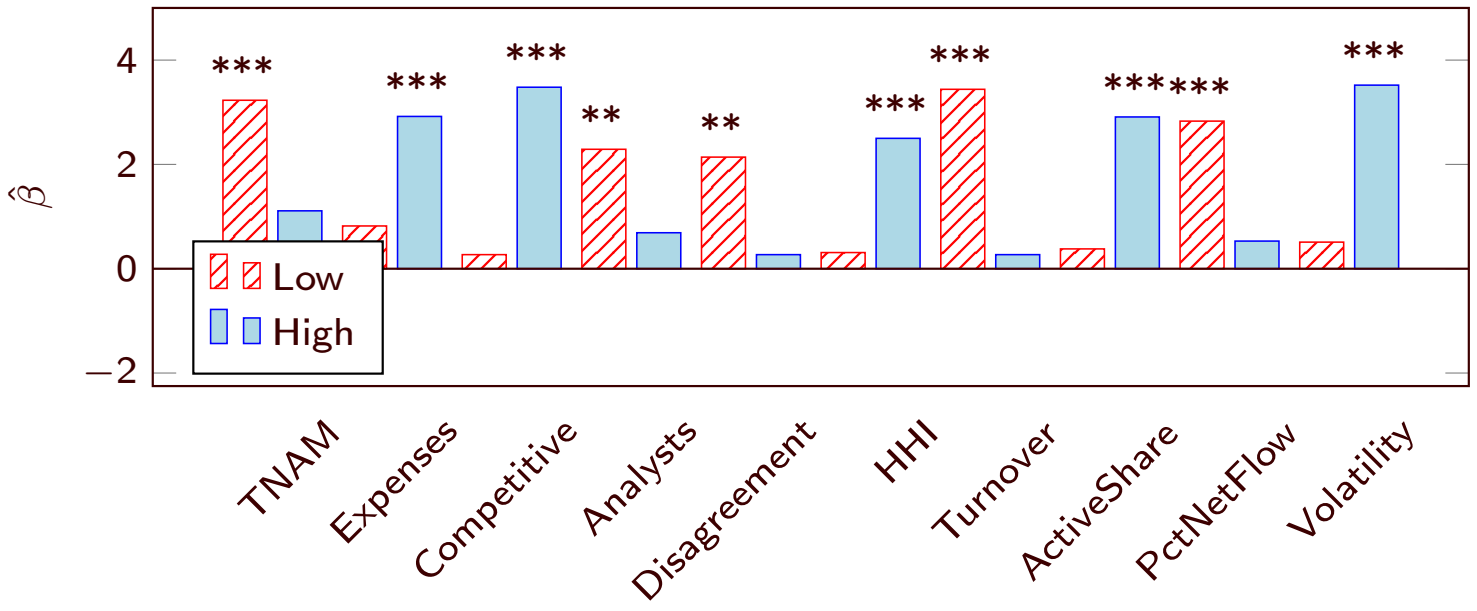


Panel B: Sample Split by E-Score.

	E-Score ≤ 2	E-Score $= 3$	E-Score $= 4$	E-Score ≥ 5
	Alpha	Alpha	Alpha	Alpha
PctWk	-1.19	-0.44	3.51***	6.06***
	(0.91)	(0.97)	(1.35)	(1.23)
N	6,337	6,203	5,182	7,785
R^2	0.20	0.17	0.13	0.12



The relation between effort and future returns is strongest for small, expensive funds with high concentration and active share, low turnover, and highly competitive incentives.



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Stocks they buy and sell during during periods of high effort (especially those they acquire information about) outperform their portfolio and benchmark.

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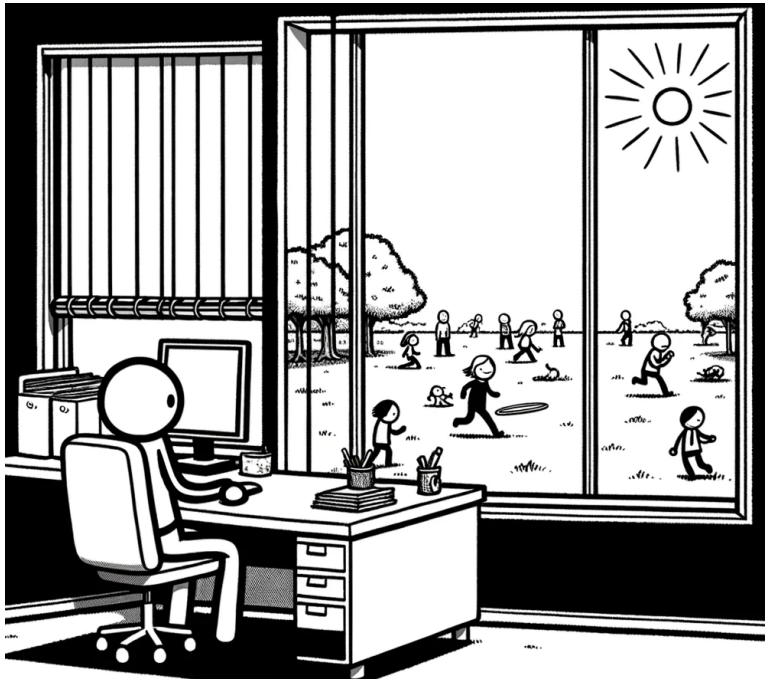

Costly Effort

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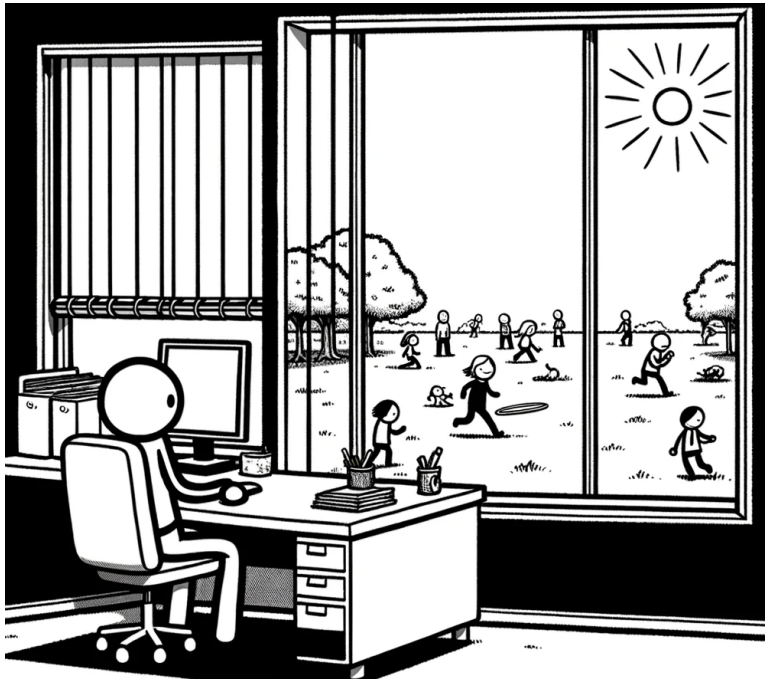

Costly Effort

Easy Effort

(1)	(2)	(7)	(8)	(9)	(10)
	First Stage	Second Stage			
	All Obs.	E-Score ≥ 4			
	PctWkF	Alpha	CAPM	FF3	FF4
$\widehat{\text{PctWkF}}$		56.94***	16.79***	13.12***	18.41***
		(15.63)	(2.68)	(3.08)	(3.04)
Rain	0.03**				
	(0.01)				
N	12,349	5,764	5,670	5,670	4,841
R^2	0.77	0.15	0.21	0.17	0.16

For the funds that benefit from extra effort, more rain-induced effort results in higher returns in the future.

Effort causes higher future returns

Especially for high active share, low turnover, and competitive funds

November - February

Large and Expensive Funds

Managers facing many competitive incentives

Following outflows and increased idiosyncratic volatility

Deeper information acquisition and more trading.