

Mutual Fund Shorts and the Benefits of Acquiring Information

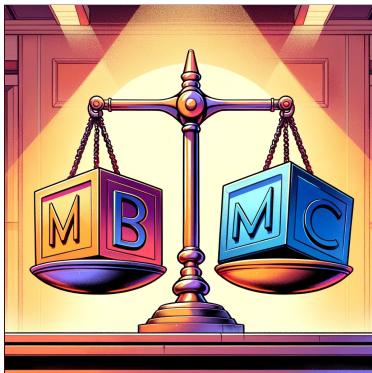
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July 11, 2024



Information acquisition is determined by the MC and MB of becoming informed.



Information acquisition is
determined by the
MB of becoming

Shorts are informed, but we
usually lump shorts together
and call them short sellers.



Information asymmetry is determined by the MB of becoming

Shorts are informed usually lump shorts and call them short sellers.

Common misconception that mutual funds don't short. Some of them do.

We combine all of these ideas to study the information acquisition activity, and the returns, for mutual funds' shorts and longs.



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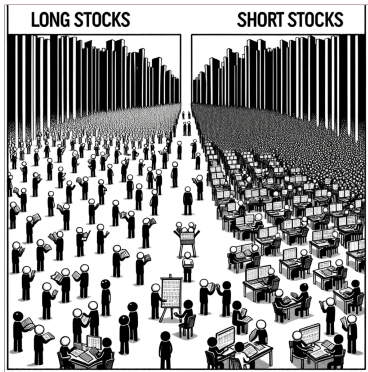
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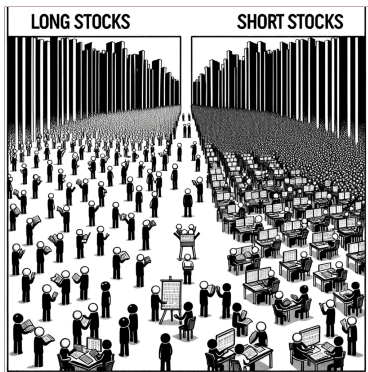
Specifically, we follow the standard theory about endogenous information acquisition ($MB = MC$) and ask: (i) Do managers acquire more information about shorts than longs? (ii) Do managers do better on their shorts than their longs?

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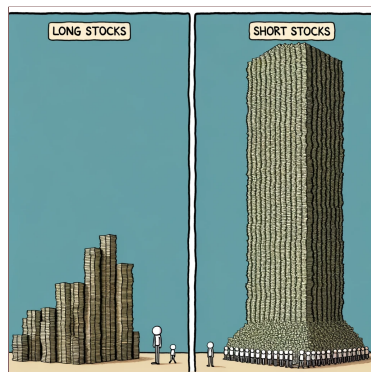
Specifically, we follow the standard theory about endogenous information acquisition ($MB = MC$) and ask: (i) Do managers acquire more information about shorts than longs? (ii) Do managers do better on their shorts than their longs? and (iii) Does acquiring more information mean better returns?



MFs learn more about their
shorts than their longs.
5% more for shorts.

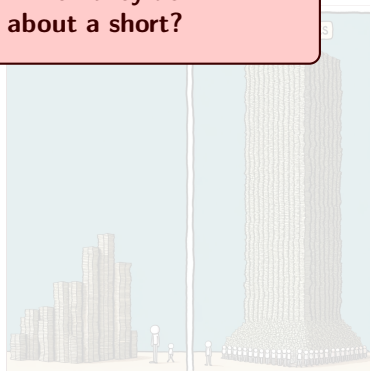
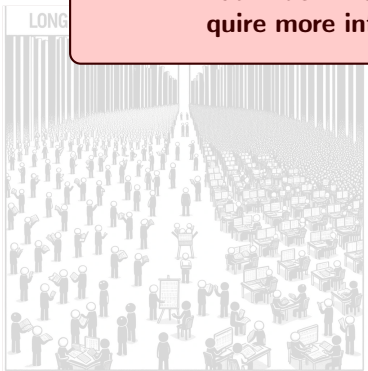


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MFs do better on their
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100bps more per quarter.

But... do MFs do better when they acquire more information about a short?



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No! It turns out they do worse... more on this later.

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Outline

① Introduction

② Data

③ Hypotheses

④ Testing Predictions

⑤ Returns to MFIA

⑥ Conclusion

Data

The EDGAR Log Files

IP Address	Date	Time	CIK	Accession
206.15.89.gjc	20170531	09:47:33	051143	000104746917001061
38.65.241.fhf	20170531	11:07:28	274191	000002741917000008
67.199.249.igg	20170624	12:27:02	320193	000032019317000009

The log files show **who** is looking at **whom**. We can also see **when** and **what** they are looking at.

The EDGAR Log Files

Mutual Fund	Date	Time	Ticker	Filing
Dodge & Cox	20170531	09:47:33	IBM	10-K for 2016
Harbor Capital	20170531	11:07:28	TGT	10-K for 2016
Golub Group	20170624	12:27:02	AAPL	10-Q for Q2 2017

This is especially true when we link IP addresses to **mutual funds** and **ciks** to **firms**.

In this project, we care a lot about the **mutual funds**, the **dates**, and the **firms** they are looking at.

The EDGAR Log Files

Mutual Fund	Quarter	Stock	Requests
Dodge & Cox	201702	IBM	30
Harbor Capital	201702	TGT	1
Golub Group	201702	AAPL	16

We aggregate these data at the **mutual fund family** – **stock** – **quarter** level.

$Requests_{ijt}$ is the total number of requests made by **mutual fund family** i for filings from **stock** j during **quarter** t . (We scale using the natural log.)

We will also use $Requests_{ijt,t-1}$ to aggregate requests over the last two quarters.

The placeholder $MFIA_{ijt}$ may also be used to indicate requests as “mutual fund information acquisition.”

CRSP Mutual Funds

This dataset has key holdings data to help identify long and short positions.

We focus on $nbrShares_{ijt}$ for the funds within fund family i .

When any fund reports positive shares in a quarter, $Long_{ijt} = 1$

When any fund reports negative shares in a quarter, $Short_{ijt} = 1$

Mutual Fund	Quarter	Stock	Requests	Long	Short
Dodge & Cox	201702	IBM	30	1	0
Harbor Capital	201702	TGT	1	0	1
Golub Group	201702	AAPL	16	1	1

We also define $NewLong_{ijt}$ and $NewShort_{ijt}$.

Inclusion Criteria and Sample

- The universe of mutual fund family – stock – quarter observations is unwieldy and filled with zeros.
 - Not a lot of fund managers are regularly checking in on Axonics, Inc.
 - **Require $nbrShares_{ijt}$ to be nonzero for at least one quarter for each i, j pair.**

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- The EDGAR Log Files is limited to the period between 2010 and 2017.
 - **30 quarters.**
- Limited to mutual fund families that have been unmasked **and** have ever had a short position in our sample period.
 - **115 families unmasked. 55 of these families ever went short.**
- **Other Data Sources:** IBES, Thomson Reuters, Ravenpack, Morningstar, and the Stambaugh, Yu, & Yuan Mispricing Measures.

Summary Statistics

Summary of the Panel (Family-Stock-Quarter Observations)

Variable	Mean	Std. Dev.	Median	N
Requests _{ijt}	1.92	21.93	0	4,937,880
$\mathbb{1}\{\text{Requests}_{ijt} \geq 1\}$	0.13	0.34	0	4,937,880
Long _{ijt}	0.37	0.48	0	4,937,880
Short _{ijt}	0.02	0.14	0	4,937,880
NewLong _{ijt}	0.04	0.20	0	4,937,880
NewShort _{ijt}	0.01	0.09	0	4,937,880

4.9 million observations in total (fewer when we require non-missing observations for other variables).

The average requests per month is 1.92 (median is zero). This is due to the large panel and many families not looking at many stocks at all.

13% of all observations have some level of information acquisition between family i and stock j .

37% of observations are longs. 2% are shorts. The rest of the observations denote no current position.

Summary Statistics

Summary of Family-Quarter Observations

Variable	Mean	Std. Dev.	Median	N
Requests _{it}	7,122	19,278	1,219	1,650
$\mathbb{1}\{\text{Requests}_{it} \geq 1\}$	0.89	0.32	1	1,650
TNAM _{it} (<i>millions</i>)	147,063	341,110	47,510	1,343
Funds _{it}	69	61	55	1,343
Stocks _{it}	185	177	111	1,179
Turnover _{it}	60	42	54	1,333
HHI _{it}	81	82	50	1,179
Expense Ratio _{it}	1.2	.33	1.2	1,333
Netflow12 _{it}	0.002	0.018	0.001	1,336

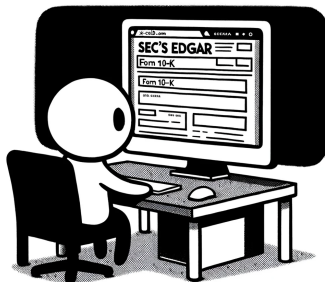
The typical family makes over 7,000 requests per quarter (median is 1,219).

89% of all quarters have some level of information acquisition for families.

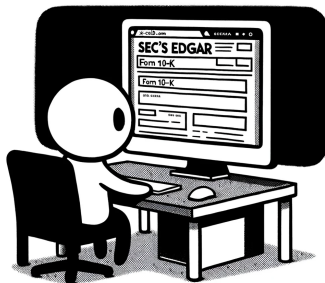
Hypothesis Development



Information acquisition is determined by the MC and MB of becoming informed.



Marginal Costs: acquiring, downloading, reading, analyzing, processing...



But these costs don't change based on the intended use of the information (i.e., to go long or short).

What about the **benefits** of information acquisition?

- Reduce uncertainty.
- Reduce risk.
- Make better decisions.
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Importantly, these benefits are different for shorts than for longs.

- Shorts are riskier.
- Shorts are more costly.
- Short selling is constrained.

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Importantly, these benefits are different for shorts than for longs.

- Shorts are riskier.
- Shorts are more costly.
- Short selling is constrained.

The marginal benefits of acquiring information about shorts should exceed the marginal benefits of acquiring information about longs.

Prediction 1

Mutual fund managers acquire more information about their shorts than longs.

What about the **returns** earned to longs versus shorts?

- Short selling is riskier.
- Short selling is more costly.
- Fewer investors engage in short selling.
- Overpricing is more likely than underpricing.

What about the **returns** earned to longs versus shorts?

- Short selling is riskier.
- Short selling is more costly.
- Fewer investors engage in short selling.
- Overpricing is more likely than underpricing.
- **Previous research shows shorts are informed (i.e., they earn high returns).**
 - But this finding comes from compiling shorts together, not testing shorts against longs by the same investors.

Prediction 1

Mutual fund managers acquire more information about their shorts than longs.

Prediction 2

Mutual funds' shorts earn larger returns than their longs.

Testing Predictions

Prediction 1

Mutual fund managers acquire more information about their shorts than longs.

$$MFIA_{ijt} = \beta_1 Long_{ijt} + \beta_2 Short_{ijt} + \gamma_i + u_j + \omega_t + \epsilon_{ijt}$$

We are interested in β_1 , β_2 , and testing whether $\beta_2 - \beta_1 = 0$.

- $MFIA_{ijt} \in \{Requests_{ijt}, Requests_{ijt,t-1}\}$
- Including family, quarter, and stock fixed effects.
- Omitted category: Non-holdings during quarter t .
- We will use lagged measures of $MFIA$.

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	MFIA = Requests _{ijt}		
	MFIA	L1.MFIA	L2.MFIA
Long	0.11*** (0.00)	0.09*** (0.00)	0.08*** (0.01)
Short	0.16*** (0.02)	0.15*** (0.02)	0.13*** (0.02)
$H_0: \beta_2 - \beta_1 = 0$	0.05*** (0.02)	0.05*** (0.02)	0.05*** (0.02)
N	4,880,267	4,715,840	4,552,324
R ²	0.37	0.37	0.38

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Mutual funds learn more about both their shorts and their longs.

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Mutual funds learn more about their shorts **THAN** their longs.

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We are interested in β_1 , β_2 , and testing whether $\beta_2 - \beta_1 = 0$.

- We also look at *NewShort* and *NewLong*.

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	MFIA = Requests _{ijt}		
	MFIA	L1.MFIA	L2.MFIA
NewLong	0.06*** (0.00)	0.01 (0.01)	-0.01 (0.00)
NewShort	0.08*** (0.02)	0.06** (0.02)	0.05** (0.02)
$H_0: \beta_2 - \beta_1 = 0$	0.02 (0.02)	0.05** (0.02)	0.05** (0.02)
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Mutual funds especially acquire information about **NEW** positions.

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The evidence supports the prediction that mutual fund managers acquire more information about shorts than longs, but is there evidence for the rationale as well?

Are the characteristics of shorted stocks correlated with higher marginal benefits of information acquisition?

$$ShortInt_{jt} = \beta X_{jt} + u_j + \omega_t + \epsilon_{jt}$$

We are interested in the coefficient estimates for *IdioVol*, *Disagreement*, *News*, *MCAP*, *InstOwn*, and *Mispricing*.

Are the characteristics of shorted stocks correlated with higher marginal benefits of information acquisition?

	ShortInt	ShortInt	ShortInt	ShortInt
IdioVol	0.385*** (0.095)	0.381*** (0.095)	-0.249*** (0.043)	-0.246*** (0.044)
Disagreement	0.011*** (0.004)	0.011*** (0.004)	0.012*** (0.004)	0.013*** (0.004)
News	-0.004*** (0.001)	-0.004*** (0.001)	-0.003*** (0.000)	-0.003*** (0.000)
MCAP	-0.014*** (0.001)	-0.014*** (0.001)	-0.017*** (0.002)	-0.017*** (0.002)
InstOwn	-0.005*** (0.001)	-0.005*** (0.001)	0.001 (0.001)	0.001 (0.001)
Mispricing	-0.001 (0.006)		0.017*** (0.004)	
Underpriced		0.004*** (0.001)		-0.001 (0.001)
Overpriced		0.003*** (0.001)		0.003*** (0.001)
Obs.	49,947	49,947	49,849	49,849
R ²	0.23	0.23	0.73	0.73
Stock FE	No	No	Yes	Yes

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Risk, uncertainty, information environment, and mispricing
are all related to short interest as we expect.

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Not exactly true **within stocks**, but overall the findings support the idea that shorted stocks have higher benefits of information acquisition.

Do MF managers acquire more information for stocks with these same characteristics, regardless of a long or a short position?

$$MFIA_{ijt} = \beta X_{jt} + \gamma_i + u_j + \omega_t + \epsilon_{ijt}$$

We are interested in the same coefficient estimates: *IdioVol*, *Disagreement*, *News*, *MCAP*, *InstOwn*, and *Mispricing*.

Do MF managers acquire more information for stocks with these same characteristics, regardless of a long or a short position?

	MFIA	MFIA	MFIA	MFIA
IdioVol	1.864*** (0.185)	1.914*** (0.184)	1.391*** (0.150)	1.402*** (0.149)
Disagreement	0.031*** (0.007)	0.033*** (0.007)	0.013 (0.009)	0.014 (0.009)
News	0.072*** (0.003)	0.072*** (0.003)	0.028*** (0.002)	0.028*** (0.002)
MCAP	0.068*** (0.002)	0.067*** (0.002)	0.025*** (0.003)	0.025*** (0.003)
InstOwn	-0.004*** (0.001)	-0.004*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)
Mispricing	0.102*** (0.011)		0.035*** (0.010)	
Underpriced		-0.014*** (0.002)		-0.004** (0.002)
Overpriced		0.008*** (0.003)		0.002 (0.002)
Obs.	1,849,532	1,849,532	1,849,527	1,849,527
R ²	0.52	0.52	0.53	0.53
Stock FE	No	No	Yes	Yes

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Managers acquire more for stocks with more risk, more uncertainty, fewer institutional owners, and more mispricing.

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Underpriced		-0.014*** (0.002)		-0.004** (0.002)
Overpriced		0.008*** (0.003)		0.002 (0.002)
Obs.	1,849,532	1,849,532	1,849,527	1,849,527
R ²	0.52	0.52	0.53	0.53
Stock FE	No	No	Yes	Yes

Approximately the same results within stock.
Managers acquire more about stocks with higher
marginal benefits of information acquisition.

Prediction 2

Mutual funds' shorts earn larger returns than their longs.

$$Return_{ijt} = \alpha + \beta Short_{ijt} + \lambda Z_{jt} + \gamma_i + \epsilon_{ijt}$$

We are interested in α and $Short + \alpha$.

- $Return_{ijt}$ is either excess returns from the four-factor model ($ExRet$) or characteristic-adjust returns ($DGTW$).
- Including a family fixed effect.
- We estimate the model on only long positions (α is the abnormal return).
- We estimate the model on only short positions (α is the abnormal return).
- And we estimate the model on both long and short positions.
 - α is the abnormal return for longs.
 - $Short + \alpha$ is the abnormal return for shorts.

Prediction 2

Mutual funds' shorts earn larger returns than their longs.

$$Return_{ijt} = \alpha + \beta Short_{ijt} + \lambda Z_{jt} + \gamma_i + \epsilon_{ijt}$$

	Long Only		Short Only		All Positions	
	ExRet	DGTW	ExRet	DGTW	ExRet	DGTW
MktReturn	1.01*** (0.02)	0.03** (0.01)	1.02*** (0.05)	0.05** (0.02)	1.01*** (0.02)	0.03** (0.01)
α	0.29* (0.14)	0.08 (0.10)	-1.29*** (0.25)	-1.18*** (0.14)	0.29** (0.14)	0.08 (0.10)
Short					-1.61*** (0.26)	-1.33*** (0.23)
<i>Short + α</i>					-1.32*** (0.31)	-1.25*** (0.17)
Obs.	1,721,856	1,317,857	47,118	35,367	1,768,976	1,353,224
R ²	0.19	0.00	0.16	0.00	0.19	0.00

Prediction 2

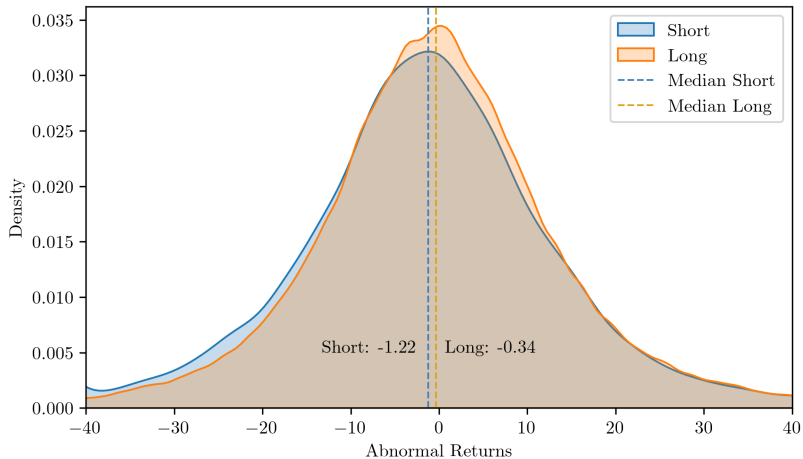
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	Long Only		Short Only		All Positions	
	ExRet	DGTW	ExRet	DGTW	ExRet	DGTW
MktReturn	1.01*** (0.02)	0.03** (0.01)	1.02*** (0.05)	0.05** (0.02)	1.01*** (0.02)	0.03** (0.01)
α	0.29* (0.14)	0.08 (0.10)	-1.29*** (0.25)	-1.18*** (0.14)	0.29** (0.14)	0.08 (0.10)
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		0.00	0.16			0.00

Shorts earn larger returns than longs, on average.

Shorts earn over 100bps per quarter, on average.



Prediction 2

Mutual funds' shorts earn larger returns than their longs.

$$Return_{ijt} = \alpha + \beta \text{NewShort}_{ijt} + \lambda Z_{jt} + \gamma_i + \epsilon_{ijt}$$

	All Positions					
	New at t		New at $t - 1$		New at $t - 2$	
	ExRet	DGTW	ExRet	DGTW	ExRet	DGTW
MktReturn	1.03*** (0.02)	0.08*** (0.02)	1.05*** (0.04)	0.05*** (0.02)	1.06*** (0.04)	0.06** (0.02)
α	2.26*** (0.17)	2.08*** (0.20)	-0.52** (0.22)	-0.44*** (0.12)	-0.81*** (0.25)	-0.60*** (0.17)
NewShort	-3.64*** (0.35)	-3.37*** (0.36)	-0.93*** (0.30)	-0.69*** (0.25)	-0.20 (0.22)	-0.37* (0.21)
NewShort + α	-1.38*** (0.42)	-1.29*** (0.28)	-1.45*** (0.35)	-1.13*** (0.26)	-1.01** (0.27)	-0.96*** (0.23)
Obs.	197,116	139,044	198,931	134,938	187,356	128,111
R ²	0.19	0.01	0.15	0.00	0.16	0.00

Prediction 2

Mutual funds' shorts earn larger returns than their longs.

$$Return_{ijt} = \alpha + \beta \text{NewShort}_{ijt} + \lambda Z_{jt} + \gamma_i + \epsilon_{ijt}$$

	All Positions					
	New at t		New at $t - 1$		New at $t - 2$	
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α	2.26*** (0.17)	2.08*** (0.20)	-0.52** (0.22)	-0.44*** (0.12)	-0.81*** (0.25)	-0.60*** (0.17)
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	6	139,044 0.01	198,931 0.15			28,111 0.00

New long positions don't earn returns for very long.

New short positions earn returns for a couple of quarters.

Quick Recap

- 1 Mutual fund managers acquire more information about shorts than longs.
 - Because shorts have higher marginal benefits from information acquisition, all else equal.
- 2 Mutual funds' shorts earn larger returns than their longs.
 - This is true for new longs and new shorts as well.

Does more information acquisition make positions more profitable?

- 1 **Hypothesis 1: Yes.** Learning makes it a better trade and reduces the likelihood of bad trades.
- 2 **Hypothesis 2: No.** Information acquisition is counterproductive as it may lead to indecision. Our measure of *public* information acquisition may be suboptimal when compared to acquiring *private* information.
- 3 **Hypothesis 3: No.** Managers won't learn about the clear winners, but will spend more time studying the marginal cases.

It's an empirical question!

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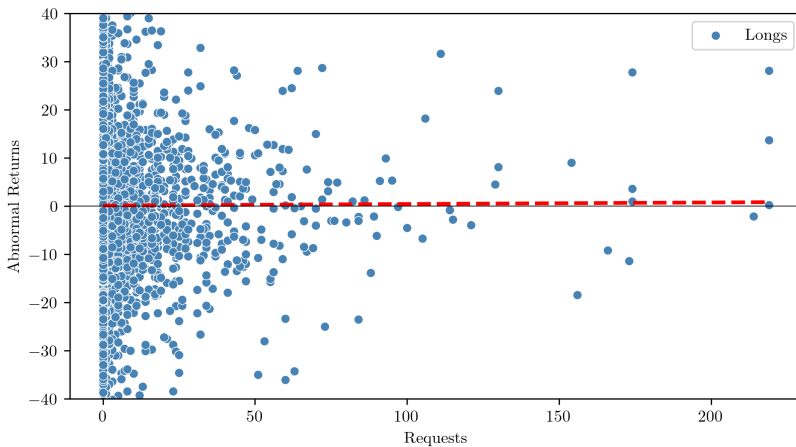
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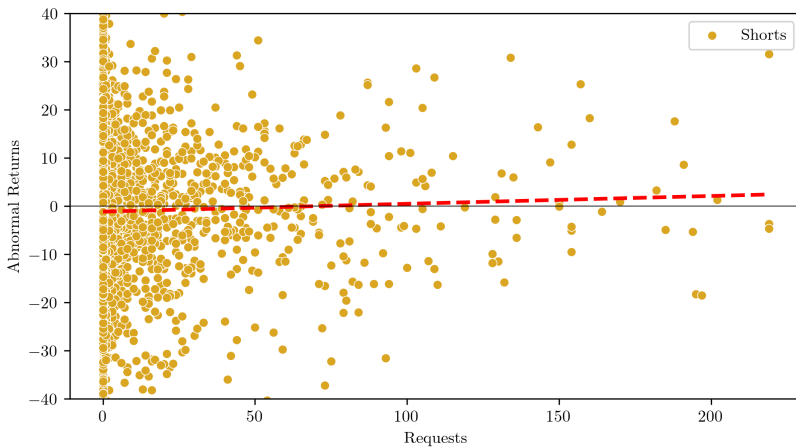
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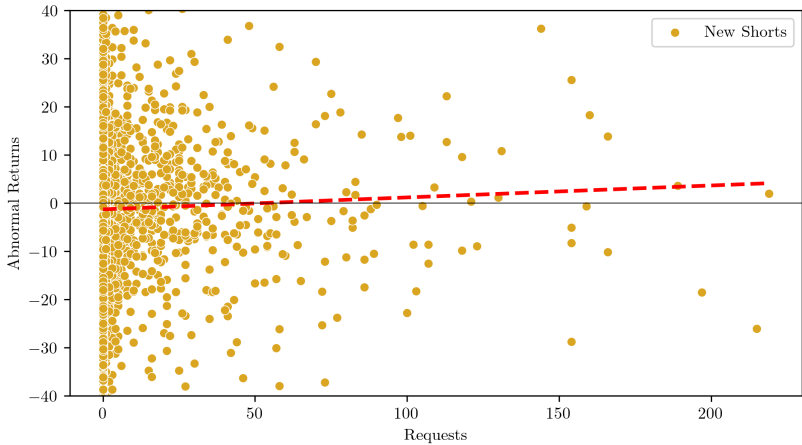
Returns to MFIA



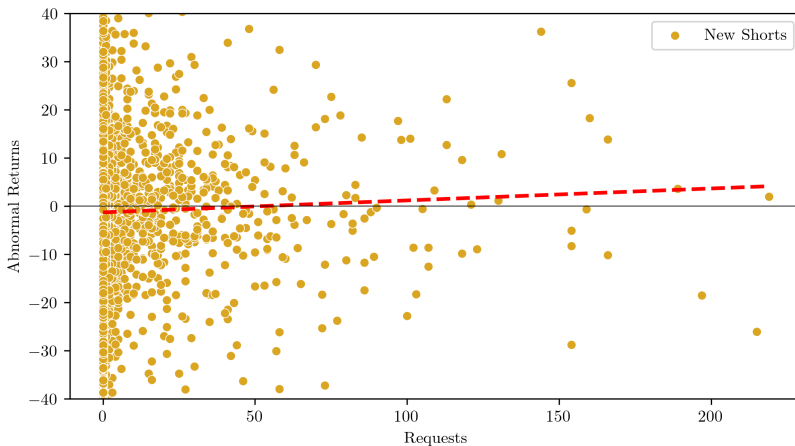
No relation between MFIA and returns for longs.



Positive relation between MFIA and returns for shorts...



... and for new shorts.



Returns and MFIA are *inversely related* for shorts.

$$Return_{ijt} = \alpha + \beta_1 MFIA_{ijt} + \delta Short_{ijt} + \beta_2 ShortXMFA_{ijt} + \lambda Z_{jt} + \gamma_i + u_j + \epsilon_{ijt}$$

We are interested in $MFIA$ and $ShortXMFA + MFIA$.

	All Positions			
	MFIA = Requests _{ijt}		MFIA = Requests _{ijt,t-1}	
	ExRet	DGTW	ExRet	DGTW
MFIA	0.06* (0.03)	0.08*** (0.03)	-0.04* (0.02)	-0.01 (0.02)
ShortXMFA	0.20** (0.08)	0.22** (0.08)	0.18*** (0.06)	0.21*** (0.07)
<i>ShortXMFA + MFIA</i>	0.26*** (0.09)	0.30*** (0.08)	0.14** (0.07)	0.19*** (0.07)
Obs.	1,768,734	1,353,132	1,710,949	1,306,197
R ²	0.24	0.06	0.24	0.06
Family FE	Yes	Yes	Yes	Yes
Stock FE	Yes	Yes	Yes	Yes

$$Return_{ijt} = \alpha + \beta_1 MFIA_{ijt} + \delta Short_{ijt} + \beta_2 ShortXMFA_{ijt} + \lambda Z_{jt} + \gamma_i + u_j + \epsilon_{ijt}$$

We are interested in $MFIA$ and $ShortXMFA + MFIA$.

	All Positions			
	MFIA = Requests _{ijt}		MFIA = Requests _{ijt,t-1}	
	ExRet	DGTW	ExRet	DGTW
Nothing going on with longs				
MFIA	0.06* (0.03)	0.08*** (0.03)	-0.04* (0.02)	-0.01 (0.02)
ShortXMFA	0.20** (0.08)	0.22** (0.08)	0.18*** (0.06)	0.21*** (0.07)
$ShortXMFA + MFIA$	0.26*** (0.09)	0.30*** (0.08)	0.14** (0.07)	0.19*** (0.07)
Obs.	1,768,734	1,353,132	1,710,949	1,306,197
R ²	0.24	0.06	0.24	0.06
Family FE	Yes	Yes	Yes	Yes
Stock FE	Yes	Yes	Yes	Yes

$$Return_{ijt} = \alpha + \beta_1 MFIA_{ijt} + \delta Short_{ijt} + \beta_2 ShortXMFA_{ijt} + \lambda Z_{jt} + \gamma_i + u_j + \epsilon_{ijt}$$

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Nothing going on with longs	All Positions			
	MFIA = Requests _{ijt}		MFIA = Requests _{ijt,t-1}	
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Obs.	1,768,734	1,353,132	1,710,949	1,306,197
R ²	0.24	0.06	0.24	0.06
Family FE	Yes	Yes	Yes	Yes
Stock FE	Yes	Yes	Yes	Yes

For shorts, returns are more positive with more MFIA.
NOT GOOD FOR SHORTS!
Hypothesis 1 is out.

Hypothesis 2

Is MFIA counterproductive? Do families that do more information acquisition do worse?

$$Return_{it} = \alpha + \beta MFIA_{it} + \lambda X_{it} + \omega_t + \epsilon_{it}$$

Hypothesis 2

Is MFIA counterproductive? Do families that do more information acquisition do worse?

$$Return_{it} = \alpha + \beta MFIA_{it} + \lambda X_{it} + \omega_t + \epsilon_{it}$$

	L0.MFIA	L1.MFIA	L2.MFIA	L3.MFIA	L4.MFIA
	Return	Return	Return	Return	Return
MFIA	0.016* (0.008)	0.014* (0.008)	0.013* (0.007)	0.011* (0.006)	0.008 (0.005)
TNAM	0.003 (0.006)	0.004 (0.006)	0.004 (0.006)	0.004 (0.006)	0.005 (0.006)
NetFlow12	-0.259 (1.150)	-0.227 (1.121)	-0.188 (1.124)	-0.138 (1.121)	-0.071 (1.144)
ExpenseRatio	-0.090*** (0.025)	-0.089*** (0.024)	-0.089*** (0.025)	-0.088*** (0.025)	-0.087*** (0.026)
Obs.	1,169	1,169	1,169	1,169	1,169
R ²	0.09	0.09	0.09	0.09	0.09

Hypothesis 2

Is MFIA counterproductive? Do families that do more information acquisition do worse?

$$Return_{it} = \alpha + \beta MFIA_{it} + \lambda X_{it} + \omega_t + \epsilon_{it}$$

No... MFIA is associated with better future performance.

	L0.MFIA	L1.MFIA	L2.MFIA	L3.MFIA	L4.MFIA
	Return	Return	Return	Return	Return
MFIA	0.016* (0.008)	0.014* (0.008)	0.013* (0.007)	0.011* (0.006)	0.008 (0.005)
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ExpenseRatio	-0.090*** (0.025)	-0.089*** (0.024)	-0.089*** (0.025)	-0.088*** (0.025)	-0.087*** (0.026)
Obs.	1,169	1,169	1,169	1,169	1,169
R ²	0.09	0.09	0.09	0.09	0.09

So Hypothesis 2 is out.

Hypothesis 3

Do managers learn less about the clear winners?

$$MFIA_{ijt} = \beta D_{jt} + \gamma_i + u_j + \omega_t + \epsilon_{ijt}$$

D_{jt} indicates whether a given stock-quarter is a *clear winner*.

LowUnderpriced = 1 when a stock is in the lowest quintile for analyst disagreement (**low uncertainty**) and the extreme lowest quintile for mispricing (**likely underpriced**).

Hypothesis 3

Do managers learn less about the clear winners?

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D_{jt} indicates whether a given stock-quarter is a *clear winner*.

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	New Long Only			New Short Only		
	MFIA	MFIA	MFIA	MFIA	MFIA	MFIA
LowUnderpriced	-0.03*** (0.01)	0.00 (0.01)	-0.01 (0.01)			
LowOverpriced				-0.08** (0.03)	-0.12** (0.05)	-0.05 (0.04)
R ²	0.48	0.51	0.50	0.65	0.68	0.68
Stock FE	No	Yes	Yes	No	Yes	Yes

Hypothesis 3

Do managers learn less about the clear winners?

Weak evidence
that clear winners
among the new longs
get less attention.

$$MFIA_{ijt} = \beta D_{jt} + \gamma_i + u_j + \omega_t + \epsilon_{ijt}$$

D_{jt} = indicator whether a given stock-quarter is a *clear winner*.

LowUnderpriced = 1 when a stock is in the lowest quintile for analyst disagreement (**low uncertainty**) and the extreme lowest quintile for mispricing (**likely underpriced**).

	New Long Only			New Short Only		
	MFIA	MFIA	MFIA	MFIA	MFIA	MFIA
LowUnderpriced	-0.03*** (0.01)	0.00 (0.01)	-0.01 (0.01)			
LowOverpriced				-0.08** (0.03)	-0.12** (0.05)	-0.05 (0.04)
R ²	0.48	0.51	0.50	0.65	0.68	0.68
Stock FE	No	Yes	Yes	No	Yes	Yes

Hypothesis 3

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Weak evidence
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$$MFIA_{ijt} = \beta D_{jt} + \gamma_i + u_j + \omega_t + \epsilon_{ijt}$$

where D_{jt} is a dummy variable equal to 1 if a given stock-quarter is a *clear winner*.

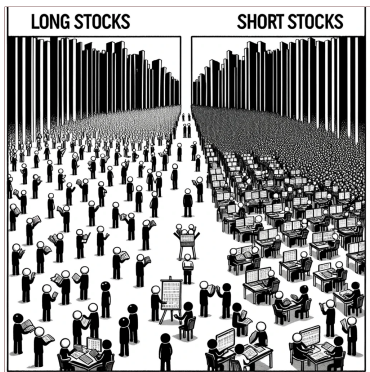
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	New Long Only			New Short Only		
	MFIA	MFIA	MFIA	MFIA	MFIA	MFIA
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R ²	0.48	0.51	0.51	0.48	0.48	0.48
Stock FE	No	Yes	Yes	No	No	No

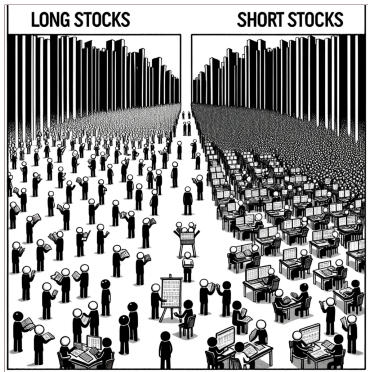
Stronger evidence that clear
winners among the new
shorts get less attention.

Conclusion

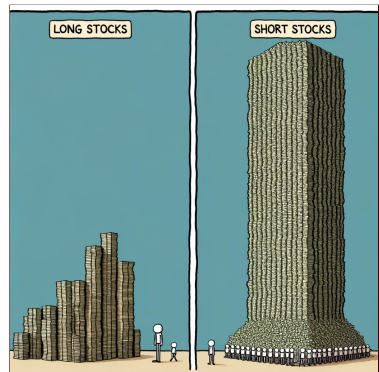
We use the standard MC = MB framework and unique data to study the information acquisition activity, and the returns, for mutual funds' shorts and longs.



MFs learn more about their
shorts than their longs.
5% more for shorts.



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MFs do better on their
shorts than their longs.
100bps more per quarter.

**But... MFs do worse on their specific shorts
when they acquire more information about them.**

**This is likely because managers acquire
less information about *clear winners*.**

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