Do Ads Influence Editors? Evidence from the U.S. Mutual Fund Industry

Jonathan Reuter University of Oregon

Eric Zitzewitz Stanford GSB

Prepared for Conference on:

"Financial Media and Investment Decisions: A Comparison of U.S. and Italian Financial Markets"

Milan, Italy May 18, 2006

Introduction

- Number and ownership of U.S. mutual funds have increased significantly in recent years...
 - There are more mutual funds than stocks in the U.S.
 - ~ 50% of all U.S. households invest in mutual funds (either directly or through employer retirement plan)
- So too has the attention that mutual funds receive from the U.S. financial media...
 - Personal finance magazines often publish articles like the "Best Funds to Buy Now" or "The Underachievers Club"
 - Until recently, NYT ran weekly column on mutual funds
 - U.S. financial media's recommendations on which mutual funds to buy (and sell) are reaching lots of potential investors

Research Questions

- What are the impact and quality of recommendations that investors receive from the U.S. financial media?
 - How important are positive or negative media mentions in explaining fund flows? ⇒ Do investors listen to media?
 - How good are positive or negative media mentions at predicting future fund returns? ⇒ Should investors listen to media?
- What is the interplay between recommendations and advertising within the U.S. financial media?
 - Are advertisers more likely to receive positive media mentions and less likely to receive negative media mentions?
 - I'll try to answer this question first...

Existing Evidence is Limited...

- In 1996, Fortune accused Forbes of "turning downbeat stories into upbeat stories in order to keep advertisers happy — even at the risk of misleading their own readers"
- Article by Steven Goldberg in May 1996 issue of *Kiplinger's* Personal Finance denied advertising influences content:
 - "The business side has no say in editorial content" — Frank Lalli, managing editor of *Money*
 - "Advertisers don't influence what we write; we strictly control contacts between the editorial and advertising sides of the magazine"
 - Ted Miller, editor of Kiplinger's
 - "There is no advertiser influence over the product of SmartMoney"

— Steven Swartz, editor-in-chief of SmartMoney

... But Hints at Mechanisms

According to statements in "Do the Ads Tempt the Editors?"

- Editors typically play both business and editorial roles
 - *Worth* editor used to call on advertisers while serving as editor
 - Claims advertisers sometimes asked for special treatment but also claims these requests were never granted
- Advertising may respond to content
 - For example, Janus pulled its ads from SmartMoney following their article "Is Janus Losing Its Touch?"
 - Janus claims pulled ads were not intended to pressure SmartMoney, but rather were response to fact that "the article was full of factual errors and no one at SmartMoney seemed interested in correcting them"

Testing for Advertising Bias

- Mutual funds are financial assets ⇒ investors should seek out mutual funds with the highest expected returns (adjusted for risk and measured after expenses)
- Therefore, publication's goal should be to recommend funds with the highest expected returns
 - For example, because low expenses are a good predictor of higher-than-average future returns, publications should tend to recommend funds with low expenses (Carhart 1997)
- Controlling for fund characteristics related to expected returns, we find advertisers' funds are more likely to receive + mentions and less likely to receive – mentions

Data Sources

- Hand-collected data on mutual fund recommendations from publications receiving most fund advertising dollars
 - National Newspapers: NYT, WSJ
 - Personal Finance Pubs: Kiplinger's, Money, SmartMoney
 - Product Review Pubs: Consumer Reports
- Purchased data on advertising expenditures by U.S. mutual fund families from Competitive Media Research
 - CMR counts and measures every ad by every family in every print media publication & estimates monthly expenditures
 - CMR annual advertising revenue estimates are within 10% of those reported in Form 10-K for NYT and WSJ
- Mutual fund characteristics and returns from CRSP

Mutual Fund Advertising Shares Vary Significantly Across Our Sample

Ranl	< Name	Sample	MF	Total	MF share
1	WALL STREET JOURNAL	х	48.5	1264.2	3.8%
2	MONEY	Х	22.1	146.6	15.1%
3	MUTUAL FUNDS		14.0	31.2	45.1%
4	NEW YORK TIMES	Х	14.0	1218.7	1.1%
5	KIPLINGERS PERSONAL FINANCE	Х	12.2	43.5	28.2%
6	SMARTMONEY	Х	8.7	54.9	15.9%
7	USA TODAY		8.7	667.2	1.3%
8	U S NEWS & WORLD REPORT		7.8	214.4	3.6%
9	BARRONS		6.8	53.2	12.8%
10	TIME		6.6	602.0	1.1%
11	FORBES		5.8	321.5	1.8%
12	WORTH		4.6	34.6	13.3%
13	FORTUNE		4.5	336.7	1.3%
14	BUSINESS WEEK		4.0	424.8	0.9%
15	INVESTMENT NEWS		3.3	9.3	35.8%
	CONSUMER REPORTS	x	n/a	n/a	n/a
Total for CMR-monitored publications			232.9	34715.9	0.7%
Sam	ple (WSJ, Money, NYT, Kiplingers, Smart	money)	105.6	2728.0	3.9%

Note: Average annual advertising revenues for period 1998-2002.

Summary of Media Mentions (TABLE 1, 1996-2002)

Publication	Article type	Content/sample title	Char.	# Fund mentions
Wall Street Journal	"Fund track" column	Industry news	0	3527
New York Times	"Investing with" column	Profile of funds and managers	+	201
Money	"Money 100" fund list	Recommended funds	+	500
Kiplinger's	All articles mentioning funds			783
Personal	General recommendations	"Best Funds to Buy Now"	+	295
Finance		"Hall of Shame"	_	63
	Within-asset-class recs	"Six Ways to Own the World"	+	300
		"The Wild Bunch"	_	12
	Single fund/family articles	"Magellan's Driven Boss"	+	69
		"Is It Time to Leave Magellan?"	_	36
SmartMoney	All articles mentioning funds			2417
	General recommendations	"Retire Ten Years Early"	+	1047
		"The Underachievers Club"	_	319
	Within-asset-class recs	"Four Great Energy Funds"	+	453
		"It's Not Easy Being Green"	_	188
	Single fund/family articles	"How Janus Got It's Groove Back"	+	279
		"What is Janus Thinking?"	_	115
Consumer Reports	Mutual funds review issue	Recommended funds	+	812

Suggestive Evidence of Advertising Bias from *Money 100*

Family advertising <i>Money</i> last 12 months	No ad data	Under \$100k	\$100- 500k	\$500k- \$1m	> \$1m
Fund families	332	194	11.2	7.6	7.4
Families represented on list	24	29	4.2	4.4	6.2
% families represented	7.2%	14.9%	37.5%	57.9%	83.8%
Funds	2446	3489	388	399	472
Funds mentioned on list	33	39	5.2	7.4	14.2
% funds mentioned	1.3%	1.1%	1.3%	1.9%	3.0%

Note: Figures reported are per year averages over the five years that we have both list composition and advertising expenditure data (1998-2002).

Formal Tests for Advertising Bias

- Formally, we test whether advertising expenditures by family F in publication P over the prior 12 months help predict media mentions in publication P in month t
 - Separate test per publication and type of mention (+ or –)
- Control variables include:
 - Fund expenses (expense ratio, 12b-1, load), past returns, past inflows, fund size, family size, Morningstar ratings, and past media mentions in other publications
 - Total print and non-print advertising expenditures by family F
 - Investment objective-by-month fixed effects
- Complication: Families choose where to advertise

Does Advertising Bias Media Mentions? (TABLE III, 1997-2002)

Publication	Content	Do Prior Advertising Expenditures Predict Mentions?	Fraction of Advertising Revenues Coming From Mutual Funds
Wall Street Journal	News		3.8%
New York Times	+		1.1%
Money	+	Yes	15.1%
Kiplinger's Personal Finance	+	Yes	28.2%
Kiplinger's Personal Finance	-		28.2%
SmartMoney	+	Yes	15.9%
SmartMoney	-		15.9%

Results are consistent with advertising bias in the personal finance magazines (Money, Kiplinger's, and SmartMoney) but not the national newspapers (WSJ, NYT)

Does Advertising Bias Media Mentions?

Type of mention	WSJ	NYT	Money 100	Kiplinger's (Positive)	Kiplinger's (Negative)	SmartMoney (Positive)	SmartMoney (Negative)	Consumer Reports
Family Advertising ove	r prior 12 m	onths (\$ r	nillions)					
Own publication	0.004	-0.361	0.294***	0.819***	-0.220	0.730***	-0.015	
	(0.035)	(0.281)	(0.088)	(0.249)	(0.663)	(0.136)	(0.256)	
Total print	0.017*	0.017	-0.044**	-0.004	0.070*	-0.014	0.025**	0.026*
	(0.009)	(0.033)	(0.019)	(0.013)	(0.027)	(0.010)	(0.012)	(0.014)
Non-print	0.024	0.007	-0.045**	-0.019*	-0.045	-0.015	0.029**	0.039**
	(0.015)	(0.027)	(0.022)	(0.011)	(0.042)	(0.010)	(0.013)	(0.018)
Observations	197,350	71,515	13,645	74,880	20,814	154,052	79,139	19,261
Objective*Month FEs	552	140	33	178	44	420	201	52

Estimation: Logit regression predicting media mentions, 1997-2002

Controls: Fund size, family size, expense ratio, 12b-1 fee, load fund dummy, net flows (t-12 to t-1), fund returns (t-12 to t-1), fund returns (t-12 to t-1) squared, the fraction of the dollars under management within each fund that received a 1-star, 2-star, 3-star, 4-star, or 5-star Morningstar rating, prior mentions in other publications (t-12 to t-1), and objective-by-month fixed effects.

Alternative Explanations?

- Are results driven by demands of readership?
 - Idea: Readers of publication P are uniquely interested in family
 F which causes both F to advertise in P and P to mention F
 - No: If this were the case, F should be more likely to receive positive and negative mentions from P, which we do not find
 - In addition, we find evidence that some personal finance publications are more likely to mention funds from families that start advertising and some are less likely to mention funds from families that stop advertising
- Are results driven by inclusion of load funds?
 - Idea: Readers of personal finance publications are unlikely to buy load funds making load families less likely to advertise?
 - **No:** Results are similar if we restrict sample to no-load funds

Is Advertising Bias Economically Significant?

- Simple way to measure economic significance of any pro-advertiser bias is to use our results to predict two sets of mutual funds
 - For the first set, we allow own-publication advertising to influence which mutual funds receive positive mention
 - For the second set, we set the coefficient on own-publication advertising equal to zero
- In each case, overlap between the two sets of predicted media mentions is significantly less than 100%

Money 100	91.5%
 Kiplinger's 	77.0%
SmartMoney	77.9%

Three Questions Remain

- We interpret fact that past advertisers are more likely to receive + mentions than – mentions as evidence of advertising bias in personal finance magazines
- Three questions remain:
- n Do investors rely on recommendations of U.S. financial media when deciding which funds to buy?
- n Should investors rely on recommendations of U.S. financial media when deciding which funds to buy?
- n Does the pro-advertiser bias we (think we) observe harm mutual fund investors?

Media Mentions and Future Net Flows (TABLE V, 1997-2001)

- Do investors rely on recommendations of U.S. financial media when deciding which funds to buy?
- Yes, in our sample, positive media mentions associated with significant net inflows over the next 12 months

New York Times	15.0%
 Money 100 	8.4%
Kiplinger's	7.2%
 SmartMoney 	7.1%
Consumer Reports	8.7%

For negative mentions, however, estimates of -1.1% and -2.1% are not statistically significant

It is hard to sell funds you don't already own

Media Mentions and Future Returns (TABLE VI, 1997-2002)

- Should investors rely on recommendations of U.S. financial media when deciding which funds to buy?
- To answer this question, we compare future returns of funds receiving + and – media mentions to their peers
 - Analyze relative and risk-adjusted returns over next 12 months
 - For most publications, returns of mentioned funds are not significantly higher or lower than return of average fund
 - NYT: Weak evidence that recommendations outperform peers by 2.6-3.9% per year
 - Consumer Reports: Weak evidence that recommendations underperform peers by 1.6-1.8% per year
 - SmartMoney: Strong evidence that funds receiving negative mention underperform peers by 2.5%-5.5% per year

Impact of Advertising Bias on Mentions (TABLE VII, 1997-2002)

- Pro-advertiser bias may account for between 8.5% and 23.0% of + mentions in personal finance magazines
- Does pro-advertiser bias explain the general failure of recommended funds to outperform their peers?
 - No, the future returns of the two sets of predicted media mentions funds are similar
 - Also, Consumer Reports does not accept advertising and its recommendations are no better than other publication we study
- What's going on?
 - U.S. financial media places too much weight on past returns and not enough weight on fund expenses ⇒ easier to write exciting stories featuring advertisers funds?

Summary

Five main findings:

- For sample of personal finance publications, we find evidence that mutual fund recommendations favor advertisers
- For sample of national newspapers, which are less dependent on mutual fund advertising revenues, we find no such evidence
- Nevertheless, investors rely on both types of publications when choosing which mutual funds to buy
- Overall, future returns of recommended funds are no better or worse than future returns of funds picked at random...
- ... which is due to fact that U.S. financial media focuses more on past returns than fund expenses when ranking funds

Conclusion

- Advertisers benefit from bias but are readers harmed?
- In our setting, the answer appears to be "no"
 - Given emphasis on past returns, personal finance magazines can recommend advertisers' funds on par with the other funds
 - Nevertheless, readers would be better off if magazines placed more emphasis on fund expenses when ranking funds
- In other settings, the answer could easily be "yes"
- But what is the alternative to advertising bias?
 - Unbiased information at a higher price or no information at all?
 - Better to have biased advice from a specialist (SmartMoney) or unbiased advice from a generalist (Consumer Reports)?